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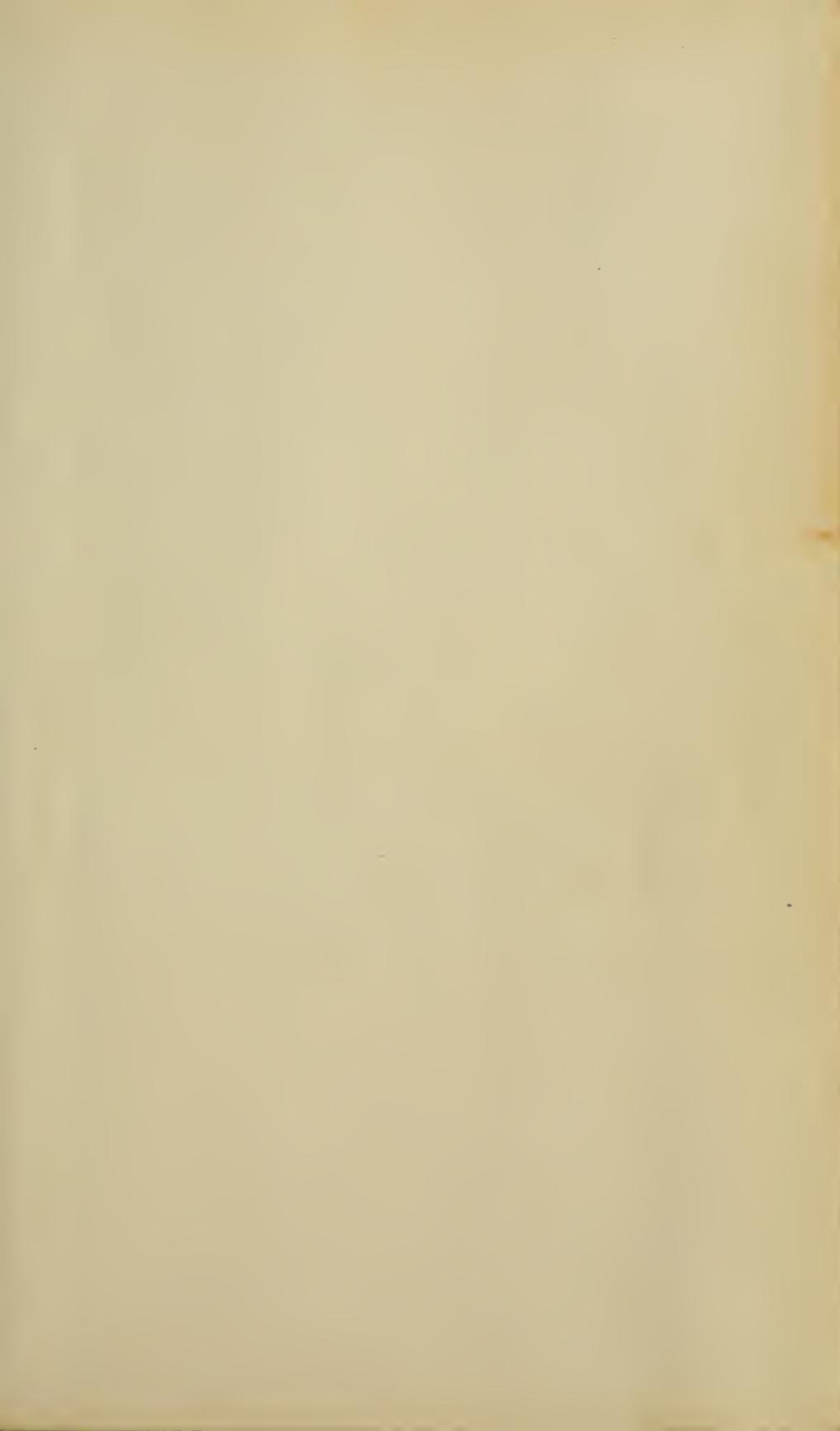
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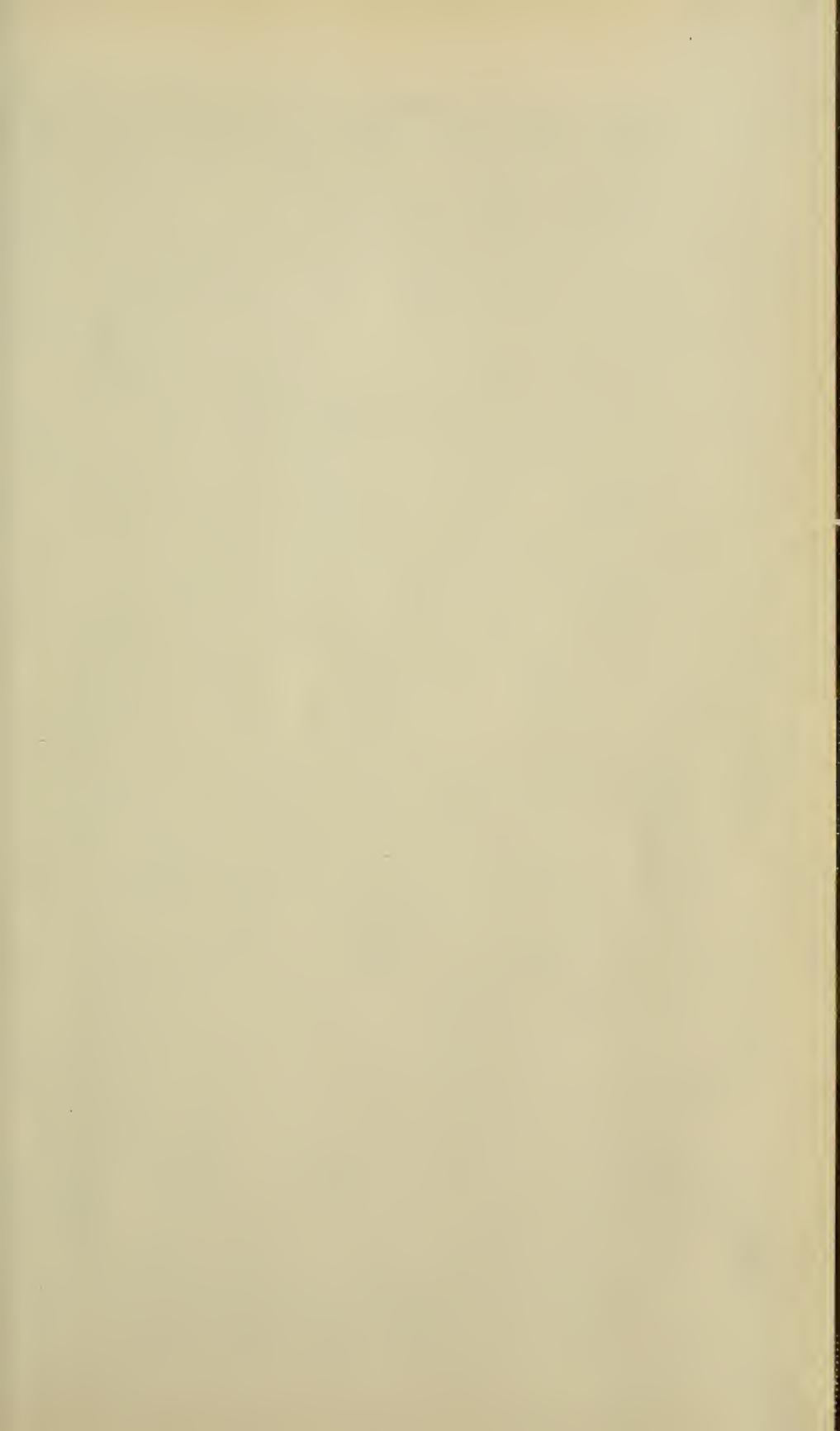
Ins and outs of baseball,



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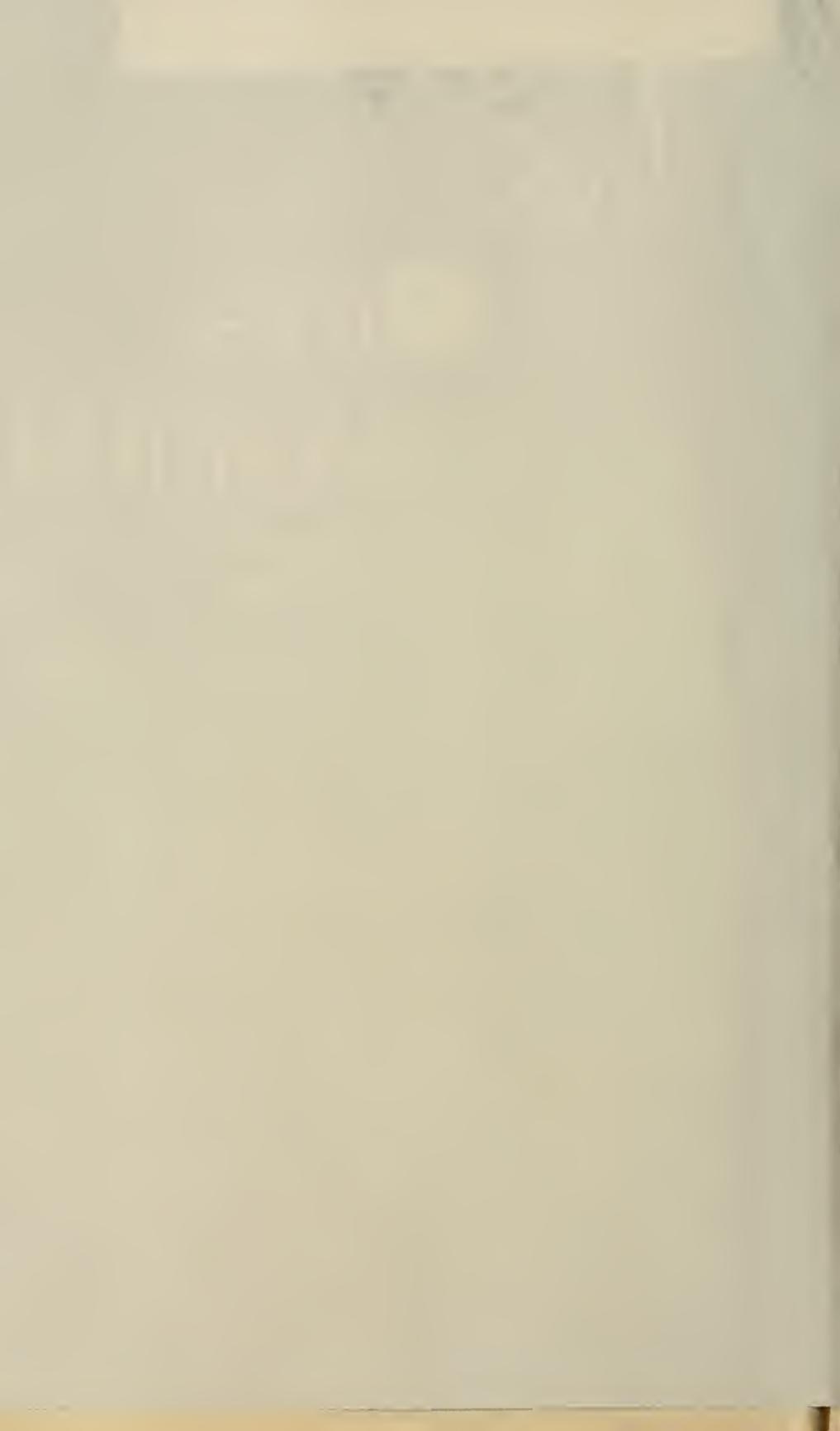
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of BASEBALL

O. H. VOGEL





2. *Runs ahead, early innings*

Call	No one on Base	Runner on First Outs			Runner in Scoring Position Outs
		0	1	2	
S 0	B 0	H	H	H,H&R,R&H	H,ST
0 1	H 1	H	H	H,H&R,R&H	H,ST
0 2	H 2	H	H	H,H&R,R&H	H,ST
0 3	T 3	T	T	T	T
1 0	H 0	H	H	H	H
1 1	H 1	H	H	H	H
1 2	H 2	H	H	H	H
1 3	H 3	H,H&R	H&R,H	H	Then wait out.
2 0	H 0	H	H	H	H
2 1	H 1	H	H	H	H
2 2	H 2	H	H	H	H
2 3	H 3	H	H,ST	H,ST	

3. *Runs behind, early innings*

Hit if pitcher has control. If not, wait out.

4. *Late innings, score tied*

Play for the winning run. Get runner into scoring position.

5. *Late innings, runs ahead*

Everyone hit.

6. *Late innings, runs behind*

Get on base any way possible. Try waiting out pitcher until strike is called. He may lose control.

The coach, of course, should know his personnel and vary his offensive strategy to fit.

(For Defensive Strategy, see Back End Paper.)

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**INS AND OUTS
OF
BASEBALL**



The Winning Run—Good Cooperation

**INS AND OUTS
OF
BASEBALL**

By

O. H. (OTTS) VOGEL

Baseball Coach, State University of Iowa,
Iowa City

With 167 Illustrations

St. Louis
THE C. V. MOSBY COMPANY
1952

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PREFACE

It is the earnest hope that the presentation of this text will in some measure lighten the work of the coach and teacher. It is further hoped that the beginner, as well as the more advanced player, will find instruction and advice that will help him in his development as a player.

The fundamentals are discussed for the beginner; more advanced play for the player of experience. Coaching procedure and practice methods described are not meant to be rigid and set, since individual players will differ in their abilities. In a given situation several interpretations may be correct. The techniques discussed are those gathered over a period of years of experience and study in coaching and playing.

Each position is a complete unit of activity which in turn is coordinated with team play as a whole. Since a beginner is often primarily interested in only his position, he may overlook its relationship to another position. It was, therefore, deemed advisable to repeat a few certain plays in which several players are involved. For example, pick-offs, in which the pitcher, shortstop, and second baseman take part, are discussed within the chapters The Pitcher and Pitching, The Play of the Shortstop, and The Keystone Combination. It is the author's feeling that such detailed treatment, even though it may seem repetitious, will aid the users of this text in both study and performance.

I am greatly indebted to William Porter, whose interest in baseball and skill as a writer aided me in making this text possible.

I also wish to thank Miss Carrie Stanley of the Department of English, who gave many hours of her time; G. T. Bresnahan, former track coach, and W. W. Tuttle of the Department of Physiology, authors of *Track and Field Athletics*, for their assistance; David Armbruster, swimming coach; Dr. W. D. Paul of the Department of Internal Medicine; and Miss Kate Daum, Head of Nutrition, for their contributions.

Robert Noble of the Alumni Office, Dr. C. C. McCloy, and Dr. Norma Young of the Department of Physical Education also made valuable criticisms and suggestions.

All of these are from the University of Iowa.

I wish to thank the Charles C. Spink & Son Company of Saint Louis, publishers of *The Sporting News*, for their permission to use their information on "How to Score" and some of their "Diamond Definitions" from their 1950 *Baseball Record Book*.

Albert B. Chandler is thanked for permission to use the *Official Baseball Rules Completely Revised*, 1951, published by the Charles C. Spink & Son Company.

The Athletic Institute of Chicago, Illinois, is especially thanked for the use of the many illustrations from their *Beginning Baseball* series, as well as some of the material; Dick Siebert, baseball coach at the University of Minnesota, for his aid; The Dallas Jones Productions of Chicago; Jim Kent of the University of Iowa Photographic Service, and Bill Frey of Iowa City, for their camera work.

I am most grateful to the following members of the University of Iowa baseball squad who appear in the photographs: Jack Dittmer, John Sullivan, Ed Browne, Merlin Kurt, Robert Christoph, Frank Bok, William and Rex Vana, Al Lenski, George Hand, Duane Brandt, and Robert Primrose.

Booker Graham gave valuable assistance in the chapter on Umpiring.

Finally, my thanks to the Rawlings Manufacturing Company of St. Louis, A. G. Spalding & Bros. of Chicago, and McGregor Goldsmith, Inc., of Cincinnati, for information on equipment.

Iowa City, Iowa

O. H. Vogel

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Official Baseball Rules Completely Revised, 1951, published by *The Sporting News*, St. Louis, Mo., Figs. 148, 149, and 150.

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INS AND OUTS OF BASEBALL

CHAPTER I

THE DEVELOPMENT OF BASEBALL

There has been some controversy as to how and when baseball originated. The generally accepted version, however, is that the game evolved in colonial times through a gradual changing and consolidation of the qualities of two English games. The first of these was a version of cricket played among the young colonials of New York, and the second was "rounders," a favorite of eighteenth and early nineteenth century Boston. Despite the grandiose nature of our American embellishments, both of these games continue in the original form and are popular in England today.

In the game of rounders, the player tossing the ball was known as the "feeder," and the player hitting the ball was known as the "striker." The feeder tossed the ball underhand and slowly so that the striker would be sure to hit it. When the striker hit the ball, he would run to a marker—a stake set in the ground. While he was running, a "scout" or third player, stationed in the field, could retrieve the ball as could the feeder. Whichever of the two retrieved the ball would try to hit the runner with a thrown ball before he could get back to the "striker's box." If the player was hit or touched with the ball while running between the striker's box and the stake, he was considered out. The purpose, of course, was to score through reaching the stake and returning to the box without being called out. There was no set distance between the box and the stake. (Rounders, in one form or another, is often called "Indian ball" or "one old cat" by the youngsters of today.)

More players entered into the game and as they did other stakes were set out—two, three, and then four. At the same time the strikers increased in number. The striker now stood in a box which was halfway between the fourth marker and the first marker. The distance between markers was sixty feet. The feeder's box was thirty-five feet from the striker's box.

Because of the many injuries from collisions with the stakes, flat stones were substituted. When the stones proved impractical, bags were filled with sand to replace the stones. These bags became known as bases, and the name "baseball" developed.

A defensive player would often kick the loose base out of the reach of the runner, so a rule was made that all bases must be staked down. A rope was attached to the base and tied to a stake driven into the ground.

The cricket players in New York started to develop a similar game. They called it the "New York game." The striker's box was forty-eight feet from first base; the distance from first base to second base was sixty feet; from second base to third base was seventy-two feet, and from third base to fourth base was seventy-two feet. A runner crossed the fourth base to score.

There were twelve men on a team: a catcher and second catcher (who took his position behind the first catcher), a thrower, four infielders, a roving infielder, three outfielders, and a roving outfielder.

The original equipment was handmade of whatever materials were available. There were no rules except those set up by the players themselves. The consequent freedom of play made the transition toward baseball almost natural.

In 1845 Alexander Cartwright, a young surveyor, designed the first baseball diamond as it is known today, except that the pitcher's plate was forty-five feet from home plate. New rules were set up which stated that there were to be nine men on a team. A time at bat was called a "hand," and when a player scored after making a circuit of the bases, he was credited with an "ace." The game was over when either team scored twenty-one aces.

In 1846 the first game was played under these rules between the New York Nine and the Knickerbocker Club on a field in Hoboken, New Jersey. The ball used was of hard rubber and the bat was broad and flat with the handle shaved down so that it could be grasped by the striker. The ball now had to be held by a fielder, and the runner was not out when hit by a thrown ball while running between bases. He had to be touched with the ball while it was in the possession of an opposing player. The feeder did not pitch the ball as in the present game, but lobbed it so that it would be easy for the striker to hit.

This game quickly increased in popularity and during the Civil War, when men of all states mingled together, many of the soldiers from the Northeast carried the equipment of the New York game with them. Soldiers who did not know the game soon learned it and after the war the returning veterans took the game back to their homes with them. In a short time almost every town in every state had its ball team. Contests were arranged between neighboring towns, and game days developed into holidays across the country.

Playing technique improved so that the game required more skill and stamina. Equipment was better and the rules more standardized. The feeder became the pitcher, and his purpose was to prevent the striker or batter from hitting the ball. (See Ch. 3, The Pitcher and Pitching, for a more detailed account of the development of the pitching game.)

The bat was now round and, with the elimination of the flat bat and the development of pitching skill, the batter found it much more difficult to hit the ball.

The catcher stood back of the batter far enough to enable him to catch the ball on the first bounce. He wore no protection such as is worn today, and, as a matter of fact, the first catcher's gloves were flesh-colored so that spectators and other players could not see them. It was only after a period of ridicule that the gloves were accepted. Shortly thereafter the catcher appeared on the field wearing both mitt and a mask, and thus attired he was able to move close

enough behind the batter to enable him to catch the ball before it bounced. It was somewhat later before other members of the defensive team appeared on the field with gloves as a part of their equipment.

The baseball diamond, as it is now designed, with ninety feet between bases and sixty feet, six inches, from pitcher's plate to home plate, appears to be ideal. These distances call for perfect timing, speed, and coordination on the part of all defensive and offensive players.

The pitcher must try to pitch the ball through a strike zone that is at the top of the knees and below the armpits and as wide as home plate. He must pitch with all of his skill in an effort to prevent the batter from hitting the ball.

When a pitched ball travels ninety miles an hour, and tests have proved this speed, the batter has less than half a second to decide whether or not he should try to hit. Even after his decision, he must still use a part of this half-second to swing the bat and contact the ball at the right place. At ninety miles an hour the ball is within reach of the bat for approximately $1/50$ of a second. Some skilled pitchers who throw faster than ninety miles an hour allow the batter a still shorter time to react. It is easy to understand why hitting takes a sharp eye and excellent timing.

After a batter has hit a ball on the ground and in fair territory, he must run to first base. This distance of ninety feet is covered in less than four seconds by good runners, and consequently the defensive team must get the ball to first base in less time.

Many times an infielder cannot waste a fraction of a second and will not have time even to straighten up to make his throw to first base. He must have perfect body balance and coordination, as well as throwing strength, to get the ball to the base accurately and in time for the first baseman to catch it without being pulled off the bag.

When a runner attempts to steal second base, the catcher has less than three seconds to attempt to throw him out. Since the runner starts with the pitch and will have a lead

off first base, the distance he has to run is shorter than that from home plate to first base. The catcher must catch the pitched ball and be able to throw so accurately and quickly to second base that the man covering catches the ball down near the base in order to make the tag. A high throw will lose a split second and may be too late because it must be brought down to tag the runner.

Today's baseball is not only a split-second game; intellectually, it is a complex one, and calls for quick thinking as much as for quick reflexes. Today's finished professional player, therefore, has had more than muscle development; he has been trained and taught. Something resembling baseball can be played anywhere, as long as there are a couple of kids and a ball, but there is no "picking up" the finer points of the game. The final skill depends upon a program of organized development that begins almost as soon as a boy is able to swing a bat.

In this connection, the program of the American Legion has made a tremendous contribution to the development of baseball in America. It permits literally hundreds of thousands of youngsters, who otherwise would never have the chance, to wear a uniform and swing a regulation bat at a regulation ball, and do so under good supervision. It plants the love of baseball early and helps it grow. In recent years considerably more than half the players of the combined National and American leagues have had Junior Legion baseball experience.

Professional baseball owes much to the Legion's activities and for the past several years has recognized that debt by a substantial cash contribution to the program each year.

Thousands of high schools and colleges also teach not just a game called baseball but the fine art of playing baseball. The game has become more than a sport. Its language has become a part of the American language; its ideals have had a strong influence in the development of our national ideals. The parent who worries about his boy seeing movies and reading stories which seem to glorify the criminal can take

comfort in the fact that, if he's any kind of boy at all, he also has his baseball heroes, and feels those heroes to be above reproach in personal honesty and character.

"Play ball!" has become more than the formal opening of an athletic competition. It has become the invitation to good living, American style.

(NOTE: Historical material drawn largely from The Athletic Institute's "Beginning Baseball," which the author of this book helped prepare.)

PART I

DEFENSE

CHAPTER 2

FIELDING AND THROWING

FIELDING

A player cannot be a good fielder without having the ability to relax. In many cases this ability is natural; others must acquire it. The coach should emphasize, as the first factor in any consideration of fielding techniques, the loose and easy approach.

When an infielder takes his fielding position he should always be thinking one pitch ahead. To do this he must keep the following in mind: the score, the inning, the call on the batter, the number of outs, the runners on base, the strength and weakness of the opposition, and his own ability as a fielder. Any or all of these may be factors in the next play. He should also assume that the next ball will be hit to him and decide beforehand what he will do if it goes to his right or to his left, what he will do if he fumbles the ball—all possibilities that may occur. Thinking ahead allows complete concentration on fielding the ball and eliminates the possibility of hesitation after the ball has been caught and a play has to be made. If the ball is not hit to him, the fielder should know what the possible play will be so that he can back it up, take a relay, or cover the proper base.

Who Fields What?

Fly balls hit directly behind the third baseman should be handled by the shortstop. The third baseman must turn

around, his back to the infield in his attempt to catch the ball, while the shortstop can keep his eyes on the ball all the way as he moves over. The shortstop also handles all fly balls hit in his territory.

The third baseman handles all fly balls hit to either side in his territory and should handle all fly balls hit to the right of the pitcher's mound. Normally he is closer to the play than the shortstop.

The second baseman handles fly balls hit directly behind the first baseman. The first baseman must also turn around with his back to the infield in the attempt to catch the ball, while the second baseman can keep his eyes on the ball as he runs for it. The second baseman also handles all fly balls hit in his own territory.

The first baseman handles all fly balls hit to either side in his territory, and fly balls hit to the left of the pitcher's mound.

Fly balls which can be handled with equal ease by either an infielder or an outfielder should be handled by the outfielder. He is coming in on the ball and facing the infield. If there is a runner on base and a throw is to be made, he also is in better position to make the throw.

Outfielders, like all defensive players, should think a pitch ahead so that they can throw to the right base after fielding the ball. They must consider the hitter, the wind, their own pitcher, and the possible plays that may arise at any stage of the game. They will then be in the right position at the right time. All types of ground balls and fly balls should be hit in practice to both infielders and outfielders so that they will learn how to play each type of batted ball.

Starting the Season

All players must field ground balls, and proper form in doing so should be practiced from the start of the season. The form should be observed by inexperienced as well as experienced players.

Fielding should be practiced on a smooth surface. This automatically is taken care of if early practice is held indoors and on a gymnasium floor. If held on a dirt floor or on the regular diamond, the ground should be dragged smooth, to avoid bad hops. At the beginning, the ball should be hit on an even hop and directly to the fielder. The fielder should move forward just a step or two, adjusting his position so that he will play the ball, and the ball will not play him.

The Basic Position for Fielding Ground Balls

The heels are placed close together, the toes pointed out at an angle of approximately 45° . The weight is on the balls of the feet. The body is in a squat position, bent at the waist with the knees well turned out. The arms and hands should be between the knees, so that the hands can touch the ground naturally and without strain. The fielder is then in his low position. He is now set to field low hops or skip balls (Fig. 1). As the ball comes to him he reaches comfortably forward, and as the ball hops into the glove the bare hand is rolled over the ball to trap it. Should the ball take a high hop, the fielder can easily come to a more upright position as he fields the ball.

This basic position should be used by all players in fielding ground balls.

Fielding in the Infield

The Ready Position

As the infielder takes his position before the pitch he should stand with his feet comfortably spread, the feet parallel or almost parallel. He faces the batter, his eyes on the pitcher, watching for the delivery of the ball. The knees and hips are slightly bent; the weight is slightly forward. The hands are usually on the knees but may be hanging loosely in front of the body (Fig. 2).

As the ball is delivered, the weight of the body is shifted farther forward to the balls of the feet. The eyes follow the



Fig. 1.—The basic position.



Fig. 2.—Ready position before the pitch.



Fig. 3.—Ready position as the pitch is made.

ball and the hands are brought farther forward. The fielder is now in good position to get a fast start on any ball hit in his direction (Fig. 3).

Ground Balls

When a ground ball is hit directly at him, the infielder should start forward with either foot (Fig. 4). He should not rise upright but stay as low as he can, keeping his eyes on the ball until it is in the glove (Fig. 5). If the ball is hit particularly hard, the infielder may not be able to advance more than a step or two; in that case he should set himself so that he can catch the ball just as it leaves the ground on the short hop, or at the top of the bounce on the hop. The best "set" is the basic position with the heels together and the body low, discussed above. If the ball is fielded below the waist, the little fingers are together, the palms turned outward, and the fingers pointed downward (Fig. 6A). The hands are relaxed and "give" as the ball is caught. If the ball is fielded above the waist, the thumbs are together, the palms turned outward, and the fingers pointed upward, the hands and wrists relaxed as they reach for the ball. The set is only for an instant, the momentum of the body carrying the infielder forward into throwing position.

On hard-hit ground balls that hug the ground, an infielder may set by dropping to one knee (Fig. 6B). A right-handed thrower should drop to his right knee, and a left-hander to his left knee. The heel of the other foot is very close to or touching the knee. If the ball is not fielded cleanly, it usually can be blocked in front of the player, where it can be readily recovered for a possible play.

As an infielder progresses and gains experience, he may set himself in fielding a medium-hit ball by advancing and coming to a stop with his feet comfortably spread, the left foot slightly ahead of the right if he throws right-handed, the right foot slightly ahead if he's left-handed. The body is low, with the hips and knees well bent, the eyes on the ball until it is in the glove (Fig. 7).

Fig. 4.—The start.



Fig. 5.—The advance.

When a ground ball is hit hard and to the right of the second baseman, shortstop, or third baseman, the player involved should start by turning on the ball of the left foot, then stepping out with the right foot (Fig. 8). The body should be kept low during the run, which should be in as straight a line as possible to get in front of the ball (Fig. 9). The fielder stops squarely in front of the ball by sliding the inside edge of the right foot on the ground until the right leg is straightened. As the leg is straightened, the right foot turns outward, the spikes of the shoe digging in to brace the right leg. The braced leg gives a firm support as the fielder steps out with his left foot in the direction of the throw (Fig. 10).



Fig. 6A.—Position of hands and body; fielding ground ball below waist.



Fig. 6B.—Dropping to one knee on hard-hit ground balls that hug the ground.

When a ground ball is hit hard and to his left, the infielder pivots to the left on the ball of the right foot and steps out with the left foot. Again he runs low, usually fielding the ball off the left foot. As he catches the ball, he should step forward and in front of the left foot with his right foot to check his



Fig. 7.—Fielding position on a medium-hit ball.



Fig. 8.—Starting to the right for a hard-hit ground ball.



Fig. 9.—The run to the right.



Fig. 10.—The brace.



Fig. 11.—Fielding a ground ball to the left and getting in position to throw.

momentum. He then steps forward with the left foot in the direction of the throw (Fig. 11).

After catching the ball, many infielders will step in back of the left foot with the right foot. This is an unfortunate habit; unless the man has body balance, he will have a tendency to make the throw off balance, causing a bad throw or a hard-to-handle sinker.

When a medium-speed ground ball is hit directly to him, the infielder should come in as quickly as he can, placing his body in front of the ball as he fields it. On medium-speed ground balls hit to either side, the infielder cuts diagonally forward as fast as he can and gets squarely in front of the ball as he fields it. For the set, either the heels-together or feet-spread position can be used.



Fig. 12.—Fielding a slowly-hit ground ball with one hand.

On a slow ground ball, the infielder advances toward the ball with all possible speed. If he throws right-handed, he shifts his body to the left and fields the ball in front of his right foot. If he is left-handed, he shifts his body to the right and fields the ball in front of his left foot.

On a very slow ground ball, the infielder may have to field the ball with one hand, the throwing hand only. The ball is fielded in motion in front of or just outside the pivot foot,

and the throw made instantly (Fig. 12). This technique, however, is strictly for the handy fielder.

When the fielder fumbles a ball, he should go after it as quickly as possible; there may still be a chance for a play. If he is right-handed, he places his right foot close to the ball as he reaches for it and if possible picks up the ball with both hands. If he is a left-handed thrower he places his left foot close to the ball as he reaches. He can then come up to throwing position more easily and maintain better body balance.

Fly Balls

When a fly ball is hit in the infield, it rotates away from the catcher and breaks toward the outfield. The infielder should keep this in mind and play the ball accordingly. If a fly ball is hit in back of an infielder, so that he must turn his back to the infield to make the catch, he should play the ball as though it were going to drop directly on his head. He then can play the break of the ball with the reach of his arms.

If the fly ball is hit so that the infielder is facing toward home plate, he should play the ball well in front of him so he can play the break of the ball toward him. In playing any fly ball an infielder should try to face the infield. If, however, a wind is blowing in from the outfield and the infielder is facing home plate, he should get directly under the ball, since it will not break as much. If there is a cross-wind, the ball should be played off the shoulder facing into the wind.

Fielding in the Outfield

When an outfielder goes into his fielding position he should immediately check the direction of the wind. This can be observed by tossing bits of grass into the air, by checking the direction smoke is blowing or by looking at moving clouds or waving flags. The direction of the wind is particularly important on a ball hit directly to or over the head of an outfielder.

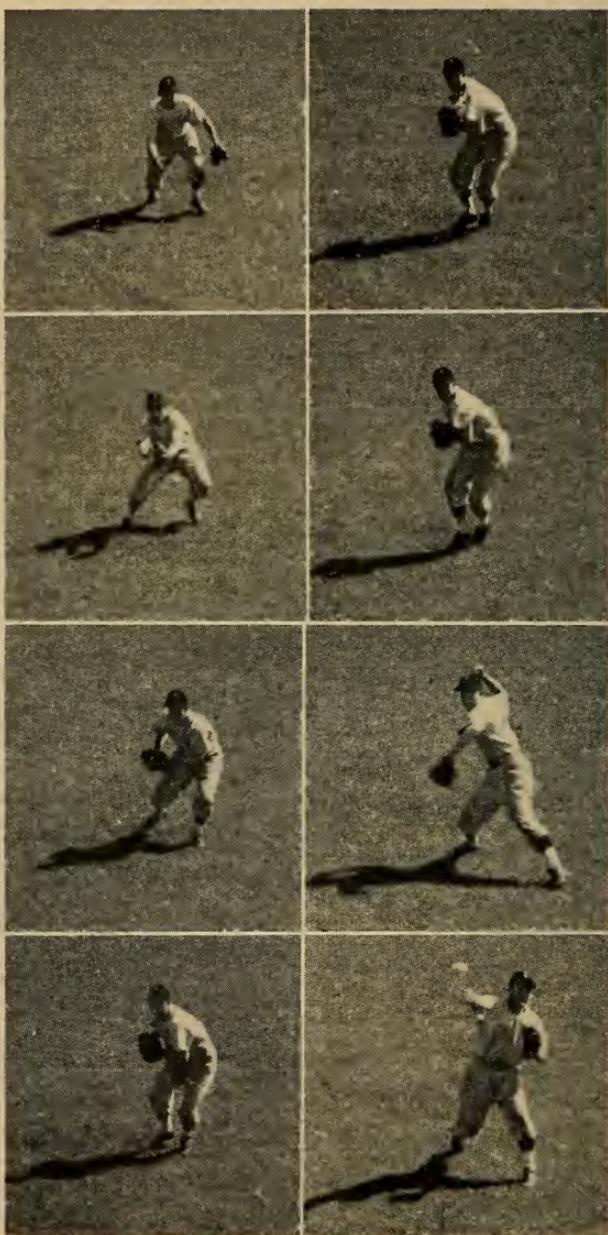


Fig. 13.—Outfielder fielding ground ball for quick throw.

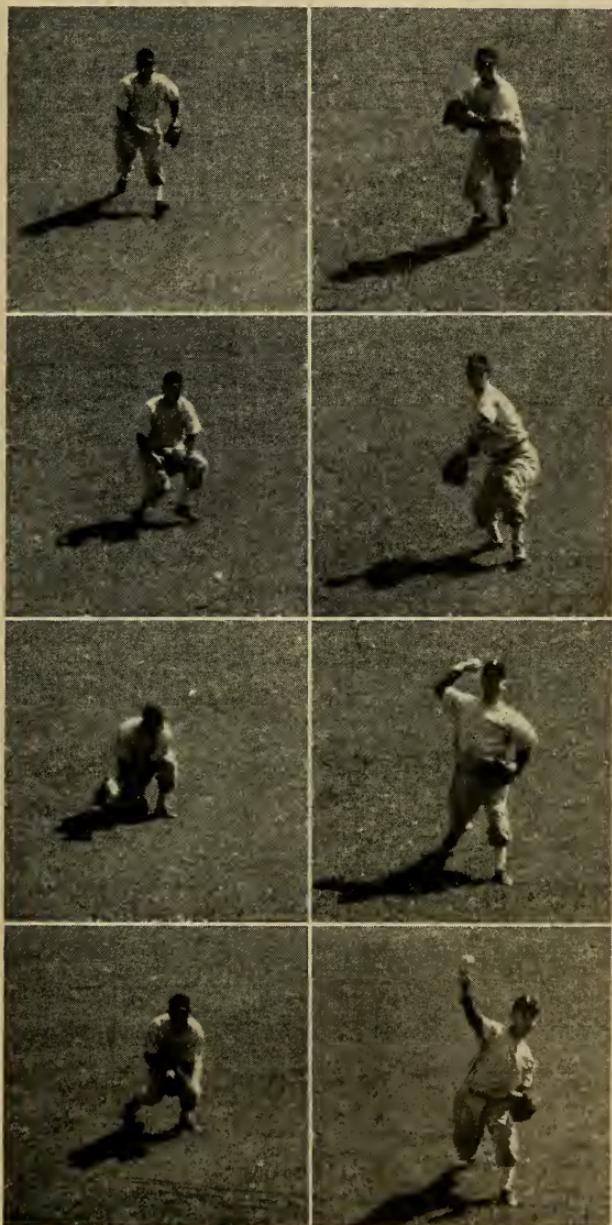


Fig. 14.—Outfielder dropping to knee to field ball.

If the wind is blowing toward the outfielder, a fly ball will naturally carry farther. If the wind is blowing in or at the outfielder's back, a fly ball will hang and carry less. If there is a cross-wind, a fly ball will carry or drift with the wind.

Preliminary to the pitch, an outfielder takes his position with his feet comfortably spread, his hands placed on his knees. As the pitch is made, he shifts his weight forward and on to the balls of his feet readying himself for a fast start to field a batted ball, or to back up any play that comes in his direction.

When a ground ball is hit to the outfield, the outfielder fields the ball in much the same manner as an infielder. When his team is ahead, or a quick throw is not required, the outfielder should play the ball safe, so that it will not get by him. He uses the heels-together position, or drops to one or both knees to block the ball. When a ground ball is fielded and a quick throw must be made, the outfielder should advance toward the ball with all possible speed, making the catch in front of his pivot foot (Fig. 13). He should try to take the ball on the long hop, since it is easier to field and puts him in better position to make a throw. If the ball hugs the ground, he may drop to the knee of the pivot foot; should the ball skip, it can then be blocked (Fig. 14).

When a fly ball is hit over an outfielder, he should always take his first step diagonally backward, so that the wind is at his back. For example, if the wind is blowing from his left, his first step is diagonally backward with his right foot (Fig. 15). If the wind is from his right, his first step is diagonally backward with his left foot. He will then be facing with the drift of the ball. If the wind is blowing directly at him and the outfielder is right-handed, he should take his initial backward step with his left foot so as to be in position to follow the ball's flight by looking over his right shoulder as he runs for it. The left-handed outfielder takes his initial step backward with his right foot, so that he can follow the flight of the ball by looking over his left shoulder. If a cross-wind is blowing toward the infield and a long fly ball is hit, the turn for the initial step should be made in the direction the

wind is blowing. If a long fly ball is hit in back of and to either side of the outfielder, the first step is taken diagonally backward and to the side to which the ball is hit.

An outfielder should never loaf or float in getting under a ball, but must determine where it will fall and get to the spot as quickly as possible. As he runs, he should take quick glances over his shoulder to watch the flight of the ball. A good outfielder will require only one or two glances to know where the ball will drop.



Fig. 15.—Outfielder taking first step in going back for fly ball. Pennant indicates wind direction.



Fig. 16.—The set of an outfielder in catching a fly ball.

As the outfielder runs for the ball, he should keep his arms at his sides in normal running position until the last split second. Then he reaches for the ball. Many young and inexperienced outfielders start reaching for the ball when they are several strides away and in this way are slowed down in their run.

If he has a throw to make, the outfielder should set himself as soon as he gets under the ball. A right-handed thrower sets his left foot ahead, and a left-handed thrower sets his right foot ahead. He catches the ball on the side of his throwing arm (Fig. 16).

As the outfielder develops in experience, he should practice so that he is always moving in on a fly ball hit close to him. He does this by running to a spot approximately a stride in back of where the ball will drop. He sets himself and takes a stride forward with his pivot foot as he catches the ball. When the occasion arises and he has to make a quick throw to keep a runner from advancing a base, he gains momentum for his throw as he takes this stride.

After an outfielder catches a ball he should not take four or five running steps before he throws. This fault is frequent in inexperienced outfielders; while the outfielder is taking extra steps, the base runner is also taking extra steps. After fielding a ball, an outfielder should take one hop step with the pivot foot and then stride out with the free foot for the throw. Or he may take a short step with the striding foot, then bring up the pivot foot, followed by a step of the striding foot for the throw. These steps, of course, are in the direction of the throw.

Position of the Hands

Ordinarily, fly balls are caught with the little fingers together, palms turned upward, and the elbows just in front of the body with the forearms extended (Fig. 17).

They also may be caught with the elbows in front of the shoulders, forearms extended upward with the thumbs together, the palms facing forward, and the fingers pointed upward (Fig. 18).

On balls caught above the head, the arms will be extended upward with the palms turned toward the ball.

Line Drives

On low line drives the outfielder will often catch the ball below his waist, in which case his fingers are pointed down-

ward, little fingers together, the palms turned toward the ball. The body will naturally be bent forward.

Line drives that are hit along the outfield foul lines, because of the rotation of the ball, will always break toward the lines unless a strong wind is blowing toward fair territory. Consequently a ball hit along the left field foul line should, if possible, be played off the left side of the left fielder, so that he will be in position to play the ball as it breaks to his right. The right fielder should play the ball off his right side, so that he will be in position to play the ball as it breaks to his left.



Fig. 17.—Position of hands in catching ordinary fly ball.

Fig. 18.—Another position of hands in catching a fly ball.

The outfielder should have a great deal of practice fielding line drives hit directly at him. An inexperienced outfielder often misjudges and underruns such a drive. This is a matter of judgment, and only through plenty of practice will the outfielder learn to figure the flight of the ball correctly.

A close game may be won by an outfielder who will dive for a line drive, particularly in late innings. If in practice he will try hard on every line drive he will automatically dive for the ball in a game, if he has any chance of catching it. This should never be done, however, unless the catch

would be a deciding factor in the game; if the fielder misses, the ball may go through with disastrous results.

POINTS TO REMEMBER

Fielding Ground Balls

1. Keep the eyes on the ball from the time it leaves the pitcher's hand until it is caught.
2. Play low at all times. It is easier to come to the upright position than to go to the crouch, should the ball take a bad hop.
3. Get in front of the ball as quickly as possible.
4. Be alert and ready to go in any direction. Shift the weight toward the batter on every pitch.
5. Place the hands in proper fielding position.

Fielding Fly Balls

1. Get under the ball or in front of the ball as quickly as possible. Do not drift or float.
2. Avoid running backward.
3. Try to face the infield when catching the ball.
4. Have plenty of practice fielding line drives.
5. Play the wind.
6. Have the hands in the correct fielding position.
7. Do not reach for the ball too soon.

THROWING

The ability to throw well is one of the most important skills in baseball and unless each member of a team can throw with speed and accuracy, the team is weakened defensively. Ideally, every player should be able to throw well from any position in which he fields the ball.

By consistent practice every boy can learn to throw and improve his throwing up to the limit of his natural ability.

The Basic Grip on the Ball

The grip on the ball is an important factor in controlling the throw. The ball should be held the same way for every throw. This is the basic grip:

The ball is grasped with the first two fingers on top, the thumb underneath, with the third finger along the side of the ball. The first two fingers are slightly spread and across the seams. This will vary from the widest part of the seams to their narrowest, depending on the individual player (Fig. 19).



Fig. 19.—The basic grip on the ball.

After the ball is caught, the fingers are shifted to the across-the-seams position as the hands swing back for the throw unless a short, quick throw is required and the player does not have time to shift his fingers. The ball is released off the ends of the first two fingers so that the release feels normal and free to the thrower (Fig. 20).

Types of Throws

There are three types of throws used: the overhand, the sidearm, and the underhand. Any of these types may be either a snap or a full arm motion.

The Overhand Throw

A boy beginning to throw (and he can begin early; for instance, at age five or six) should learn the overhand throw. It is basic, and is made from a more upright and natural

position than other types. This throw also has more carry and is the most accurate. Once it has been learned, the other types of throws follow naturally.

The beginner should start by standing upright with his upper arm parallel to the ground, and the forearm at approximately a right angle and pointing upward. The feet are placed parallel. Without moving any part of the body, the wrist is laid back, and the ball is thrown with only a snap of the wrist.

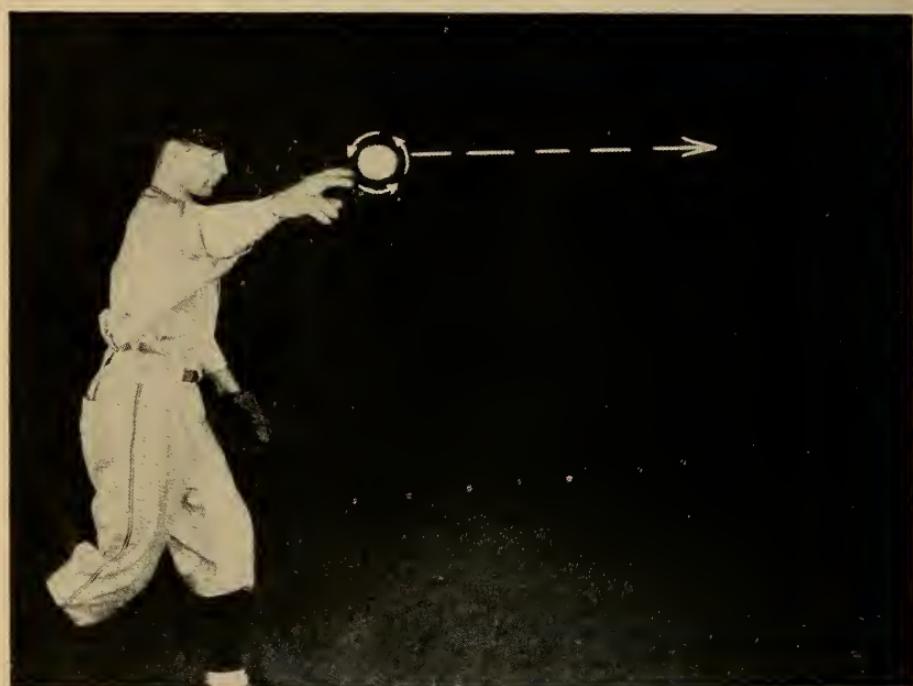


Fig. 20.—The release off the fingers.

After the snap feels natural and free, more power should be added by swinging the arm back from the shoulder, at the same time laying the forearm back from the elbow and the hand back as far as possible from the wrist. The arm, wrist, and hand are now brought forward with the elbow leading. As the elbow comes up even with the shoulder, the forearm, wrist, and hand whip forward and the arm follows through.



Fig. 21.—Starting the full overhand throw.



Fig. 22.—Position of body after release of overhand throw.

The Full Overhand Throw

When this action feels natural, the beginner is ready to add the other body movements so as to get the maximum power in his throw. As he catches the ball the weight is shifted to the pivot foot, the right foot if he is right-handed, the left foot if he is left-handed. The throwing arm and body are stretched back, the arm reaching back as far as possible. As these movements are made, the free foot starts forward in the direction of the throw (Fig. 21). As the free foot hits the ground it braces and the weight shifts to this foot. The free foot points in the direction of the throw and the body moves forward against the braced front leg.

As the arm starts forward, it is bent at the elbow and all the power from the feet, legs, hips, back, shoulders, and arms has been built up. This power is released as the ball is released with a wrist snap. The arm follows through, as do the body and back leg, until the body is in a balanced position.

The wrist should not be rotated before the release of the ball; rather, it should follow in the direction of the throw (Fig. 22). Rotating the wrist will cause the ball to curve, making it harder to catch and weakening its carrying power. There is one exception; a pitcher will rotate his wrist on certain types of pitches.

The Snap Overhand Throw

On a quick play, infielders and the catcher, with no time for a full overhand throw, use the snap overhand. From the fielding position the arm is brought directly into throwing position as quickly as possible, eliminating the full backward swing. As the arm is brought back the elbow is bent so the forearm is approximately at right angles to the upper arm (Fig. 23). If the hand and arm are brought too close to the head, the arm may cramp with resulting bad throws and loss of power. The rest of the throwing movement is the same as the full overhand throw.

On many occasions an infielder will not have time to raise his body; he then should use the snap overhand throw from

a bent body position. This will occur when a slow hit ground ball has been fielded, or a double play is in order and the ball must be thrown quickly.



Fig. 23.—The snap overhand throw.

The Full Sidearm Throw

On the full sidearm throw the arm is not bent as much at the elbow as on the full overhand throw. The forearm passes through an arc between the shoulder and the hip (Fig. 24). The body pivots more; the other body movements are, however, the same as the overhand throw. It is used when a fielder has a good throwing arm and the throw must be hurried.

The Snap Sidearm Throw

The snap sidearm throw may be used for shorter, quicker throws. The body movements are the same as the full sidearm throw, except that the elbow is bent more as the arm carries forward.



Fig. 24.—The full sidearm throw.



Fig. 25.—The underhand throw.

The Underhand Throw

In the underhand throw, the forearm passes through an arc below the waist as the arm goes forward in delivery (Fig. 25). The throw is used when the ball is fielded close to the ground and there is no time to straighten up the body.

The Snap Underhand Throw

The snap underhand throw is used when the ball is fielded close to the ground and a quicker play must be made. The body movements are the same as all the other underhand throws except that the body does not rise, and the arm action is a forearm and wrist snap with less lay-back and follow-through.

SUMMARY

Infielders should use the snap overhand throw whenever possible, using the full arm action only on long throws. There are times, however, when they will have to make the sidearm and underhand throws. These will be used when making double plays, or when making a quick snap throw such as the third baseman or second baseman makes after a slow ground ball has been fielded close to the ground and no time can be lost in getting the ball over to first base. Outfielders use the full arm overhand throw practically all the time, since their throws are usually long.

Catchers use the overhand full arm throw or the snap overhand throw; the snap throw is preferable, since it is quicker. Occasionally they may have to use a sidearm throw to avoid hitting a base runner, or when they field a ball in their area and have to get rid of it quickly.

The pitcher may use any of the snap throws after fielding a ball, depending entirely on the fielding situation and the speed with which the play must be made.

Sore Arms

The coach should keep a careful eye on his players' throwing, particularly in early season practice. He should not permit them to use their judgment entirely. They will often

throw too hard and too long, causing sore arms. Warming up should always be started at a distance of twenty or thirty feet, and as the arm becomes loosened, this distance should be increased until the player can throw at full speed.

The players should always dress to fit the weather. They should be advised not to throw snowballs in wintertime, and if they participate in other sports in which throwing is a requirement, the arm should be warmed up carefully. Once the arm is sore because of strain, the best cure is rest and heat.

CHAPTER 3

THE PITCHER AND PITCHING

In its evolution from a boisterous game played in empty lots by young men who had more enthusiasm than system to its present position as America's national game, baseball has seen many changes. It has developed more speed, more precision, more agility in both the physical and mental sense; these changes have made it not only a great spectator game, but also a sport that demands the maximum of skill and heart of the men who play it.

Since pitching is the bedrock of all defensive play in baseball, it is to be expected that most of the game's important changes should affect the pitcher and his functions. At the time of baseball's beginnings, the pitcher was supposed to make it easy for the batter to hit the ball, rather than preventing him from doing so. The pitcher stood close to the hitter (in 1842, the distance was 35 feet) and the ball was thrown with an easy toss and grooved. The only requirement for a pitcher was good control, and this was important only in terms of speeding up the game, since outs could not be registered until the ball was hit. The idea of allowing the batter only three strikes, or unsuccessful swings at the ball, did not come along until 1888, when the rule was adopted generally in organized baseball.

Meanwhile, other things were happening to the fine art of pitching. The distance from the pitcher to the hitter was increased, home plate was added, and the ball became more standardized. In 1864 a pitcher named Cummings, playing for a Brooklyn team, presumably threw the first curve, although

it was generally considered an optical illusion. Four years later, a pitcher named Fred Goldsmith demonstrated the curve ball in public, by throwing it through an arrangement of three stakes, two set approximately sixty feet apart, with one in the middle. The ball was delivered from one side of the first stake, broke around the center stake, and was caught on the original side.

In 1884, the rules were altered to allow the pitcher to deliver the ball with any type of pitching motion he preferred—overhand, underhand, or sidearm. In 1889, the rules were altered again to permit a batter who had received four pitches outside the strike zone to take first base. By 1893, when the pitching distance was established at the present 60 feet and 6 inches, the basic mechanics of pitching as an element in the game were pretty well established in their modern form.

Thus began the era in which baseball was a pitcher's game. Freak deliveries were the rage, and the pitcher was permitted to do almost anything to the ball except remove the cover. This was the day of the spitball, the emery ball, the shine ball, and other imaginative varieties.

In 1920, new rules which prohibited tampering with the ball or the use of any foreign substance on the cover eliminated many of these freak techniques. Spitballers who were then active in organized baseball were permitted to continue with their specialty, but it was otherwise outlawed, and within a few years disappeared from the game. In 1925, the present-day rule permitting the pitcher to use a rosin bag was inaugurated, and present rules permit the umpire or any player to remove the gloss from the ball by rubbing it with dirt.

It is significant, perhaps, that these rule changes—the last alterations in the basic character of the game—were followed in a few years by the rise of the slugging tradition which came to a peak with the great Babe Ruth and still dominates the game. The ball has become more lively, the distance to some fences shorter, and the man who hits the long ball has become the small boy's hero. There are many who feel this tendency is bad for baseball and takes some of the excitement and precision out of the sport; but baseball is also a

business, and there is no question that the turnstiles have clicked at a faster rate.

Meanwhile, in the effort to match the hitter's game, the pitcher has had to develop new techniques of his own. The fork ball, knuckle ball, slider and screw ball were used before 1920, but their greatest development came after that time. Many professional pitchers now throw at least one of these deliveries, and there is some reason to believe that the standard complaint of sore arms may derive from these pitches.

Regardless of these factors, the man on the hill is still the key defensive man in the sport. It is the pitcher who puts the ball in play, and he is the man who, more than any other player, controls the direction and result of the contest. Armed only with the techniques which he has taught his body to use, guided by his own good sense, the good pitcher is still the symbol of good baseball.

Qualifications

The aspiring pitcher should have natural throwing ability and be able to throw with good speed. These requirements are basic; various specific types of pitches, such as the curve, a breaking ball, or the change of pace, can be learned. He must be in good physical condition, and keep that way, since playing his position requires considerable effort. He must possess strength, endurance, poise, alertness, and a stout heart. He must get along with his teammates, at least well enough to maintain his own calm when they err behind him; he must be intelligent enough to understand the complexities of game strategy. And, it goes almost without saying, he must be willing to work hard.

Most successful pitchers are men of good physique, loose muscled, and of good height, frequently rangy. There are enough exceptions, however, to indicate that almost any kind of build will serve if a man wants to pitch and works at it. There have been good pitchers who are thin and gawky, short and fat; some have even had a physical handicap. The qualifications that make a good moundsman do not necessarily show up on the scales or the tape.

THE TECHNIQUE OF PITCHING

Most pitchers throw the ball from a three-quarter overhand delivery, and this is the one the beginning pitcher should learn. This delivery is made from a fairly upright position, and is therefore the most natural for most players (Fig. 26). Any breaking pitch, such as a curve ball, knuckle ball, or fork ball, is also more effective when delivered through this angle, since the ball not only breaks away from the side from which it is delivered, but also breaks downward. (The screw ball is the exception, breaking downward and to the side from which it is delivered.)



Fig. 26.—The three-quarter overhand delivery.

It is not desirable, however, that every pitcher be forced into the overhand pattern. A man who has had pitching experience and has a natural sidearm or underhand delivery can sometimes make the change, but it should not be done unless, after some practice, he feels that the three-quarter action is natural and comfortable.

Only one type of delivery, regardless of the type of pitch, should be used until the pitcher is complete master of that delivery. After he has mastered his natural motion, he may occasionally use a different type with considerable effectiveness, since the ball will be approaching the batter from a different angle. By way of caution, it should be remembered that in cases where a pitcher does use more than one method of delivery, he should not form the habit of pitching a specific type of pitch always in connection with the same delivery. In other words, he should be careful to avoid pitching a curve ball through one angle, and a fast ball habitually through another. It is desirable that he be able to throw all types of pitches from any type of delivery which he uses regularly.

POSITION ON THE PITCHER'S PLATE

One of the first lessons a young pitcher should learn is the proper position on the pitcher's plate. If he does not know how to stand properly before delivering the ball to the batter, a smart and alert base runner can sometimes lure him into committing a balk. The base runner may also take advantage of any fault to get a jump on the pitcher.

There are two normal positions on the pitcher's plate—the ordinary windup position, and, when there are runners on base, the set position.

The Windup Position

To assume the windup position, a right-handed pitcher places his right foot on the pitcher's plate, the front spike extended over the front of the plate. The left foot is free and behind, or off to the side, of the plate; this foot carries most of the weight. The ball is held in the right hand and hidden behind the body; the arm hangs loose and relaxed. The left, or gloved, hand hangs loosely at the side (Fig. 27). A left-handed pitcher places the left foot on the pitcher's plate, with the front spike extended over the plate in the same fashion. The right foot is free and behind, or off to the side, and this foot holds most of the weight. The left hand hides

the ball behind the body, and the gloved hand hangs loosely at the side.

The eyes are on the target.

Pitching From the Windup Position

The pitch starts with a backward swing of the arms and a bend forward at the waist, shifting the weight to the front foot. The rear foot may take one backward or sideward step in this movement. At the same time, the knees are slightly bent.



Fig. 27.—The windup position.

Then, as action is reversed with a straightening at the waist and a shifting of the weight to the rear foot, the arms swing forward and upward to a comfortable position above the head. As the arms swing up, the ball is placed between the thumb and first finger of the gloved hand, so that it is well-hidden from the batter. The wrist of the gloved hand

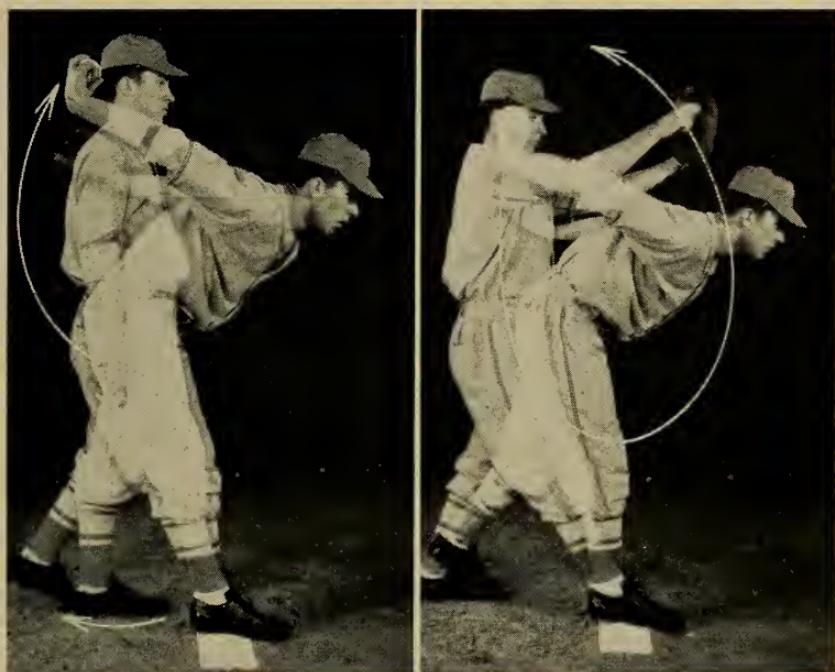


Fig. 28.—The start of the windup.

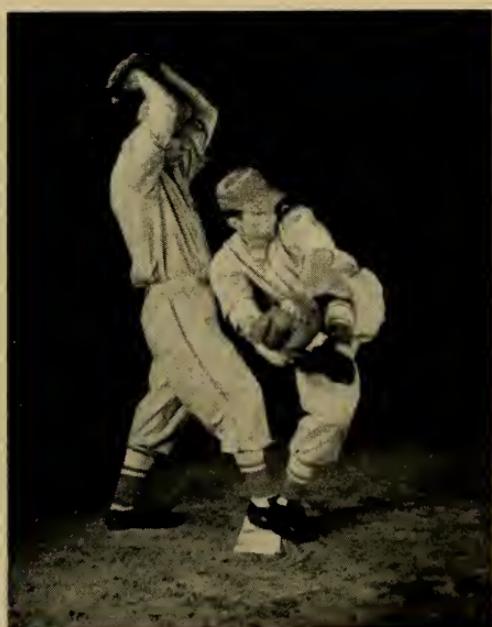


Fig. 29.—Placement of the forward foot.

should be bent only slightly (Fig. 28). To break the timing of the windup, this arm action may occasionally be repeated, or the upward movement speeded up or slowed. The forward foot is turned outward and placed against the pitcher's plate as the forward drive starts (Fig. 29). Should the plate be uneven, the spike of the shoe loose, or the dirt loosened directly in front of the plate, this placing of the foot establishes a firm contact before the push-off from the plate.

For the maximum forward drive, the overhand pitcher should bring the knee of his free foot up high across the body as the arms swing down and back. This leg action bends and pivots the body backward, and as the pitcher strides forward with the free foot the entire body goes into the pitch like an uncoiling spring, giving the maximum power and drive. At the time of the backward bend and pivot, as the arms swing back, the pitcher keeps his eyes on the target by looking over his front shoulder.

Neither the sidearm nor underhand pitcher will lift the free knee as high as the overhand pitcher; both ordinarily will use more sideward pivot.

The stride with the free foot should be natural for all deliveries, and in the direction of home plate. As this foot touches the ground, the toe should be pointing toward the plate. The hips and shoulders pivot toward the batter. All the body actions are forward, and the ball is released with a snap of the wrist (Fig. 30).

The arm and body follow through, and the pivot foot pushes off and swings around to a position almost parallel or slightly ahead of the striding foot, so that the weight is well under control. The pitcher thus is in position to go in any direction (Fig. 31). Should the ball be hit hard and directly at him, the pitcher can then protect himself as well as field the ball.

All the actions used in delivery should be the same regardless of the type of pitch to be made. This is most important, and inexperienced pitchers often tip off the batter to what they will deliver by a slight change in the motion pattern. Some of these involuntary tip-offs are:



Fig. 30.—The combined action and forward drive.



Fig. 31.—Position after delivery.

The pitching arm is loose and relaxed as it swings backward in the windup for the fast ball, but bent at the elbow as it swings backward for the windup for the curve ball.

The free leg is lifted higher in pitching the curve.

The wrist is bent inward for the curve ball as the arms go up, while it is straight for the fast ball.

To a good hitter, these unconscious habits are as revealing as sending a telegram in advance, and the beginning pitcher would be wise to ask his battery mates and fellow players to help him spot any tendencies he might develop in that direction.

A final note on the windup position: if there is a runner on third base and the score is close, the pitcher, as he takes his windup, should glance at the runner out of the corner of his eye. He will then be alert if the runner breaks for the plate on a steal, or a straight squeeze play.

The Set Position

The set position generally is used under the following conditions:

With a runner on first base, first and second base, first and third base, or with all three bases occupied, two outs, and a three-two count on the batter. In the latter situation, all runners ordinarily start moving with the first move of the pitcher. If the normal windup is used, and the batter gets a base hit, the runner from second base is sure to score.

The set position may also be used with less than two outs, a batter on third base, not more than one run difference in the score, and the squeeze play a possibility. This prevents the runner from getting a long lead.

To assume the set position, a right-handed pitcher places the right foot in contact with the pitcher's plate and the left foot a comfortable distance in front of the plate. A left-handed pitcher places the left foot in contact with the plate, and the right foot a comfortable distance ahead. When holding a runner on first base, either type of pitcher usually places the front foot slightly toward first base; when holding a runner on second base, usually places it more in line with home

plate. Some pitchers keep the weight evenly distributed on both feet (Fig. 32). Others prefer to keep more weight on the back foot; whichever position is the more natural for the player should be used. Preparatory to pitching, the pitcher may raise his arms overhead for a preliminary stretch. This loosens the shirt around the shoulders and arms so that it will not bind as the pitch is delivered. The pitcher then drops his



Fig. 32.—Weight distribution on set position.

Fig. 33.—Position of hands for set position.

hands in front of his body to a resting position slightly above the belt, arms relaxed against the body, the ball in contact with the throwing hand and glove (Fig. 33). The ball must come to rest in front of the body in this position for at least one second before it can be delivered to the batter; otherwise, a balk may be called. The throw to a base from the set position may be made at any time.

Pitching From the Set Position.—In making the pitch from the set position, the pitcher shifts his weight to the back foot



Fig. 34.—The pitch from the set position. Gripping the ball.

and presses with that foot against the pitcher's plate. He then strides toward home plate long, low, and fast, with little knee lift (Fig. 34). The arm and body movement following release of the ball are the same as in pitching from the windup position, ending with the pitcher in position to field the ball or to protect himself should a ball be hit back at him.

THE BASIC PITCHES

There are three basic pitches which all pitchers should learn to throw, and the beginner should set himself to learn them as quickly as possible: the fast ball, the curve ball, the change of pace. Other types of pitches—the knuckle ball and finger-nail ball, the screw ball, the fork ball, and the slider—are common in professional baseball and will be discussed below, but these are not recommended for the beginner. They are hard to master; in addition, they put an extra strain on the arm and may lead to soreness of the throwing muscles. As the pitcher grows more experienced, he will naturally want to experiment with some of these fancy deliveries. Like the infantryman and his rifle, however, mastery of the basic weapon must come first.

Probably no pitcher can deliver every type of pitch successfully, but one who has a good fast ball, a fair curve, and a change of pace can be successful in almost any competition—provided he is smart, has good judgment, and emotional stability.

The Fast Ball

The most important pitch for the beginner to learn is the fast ball.

The ball should be grasped so that the fingers of the throwing hand make the best contact on the seams of the ball. The grip ordinarily will depend upon the individual pitcher, and he should experiment until he finds the grip most comfortable and efficient for him. Many pitchers, for the fast ball, hold the ball with the first two fingers on top and across the seams at their widest part. The thumb is underneath, and the third finger along the side of the ball. Other pitchers grasp the ball with the first two fingers along the seams at their narrowest

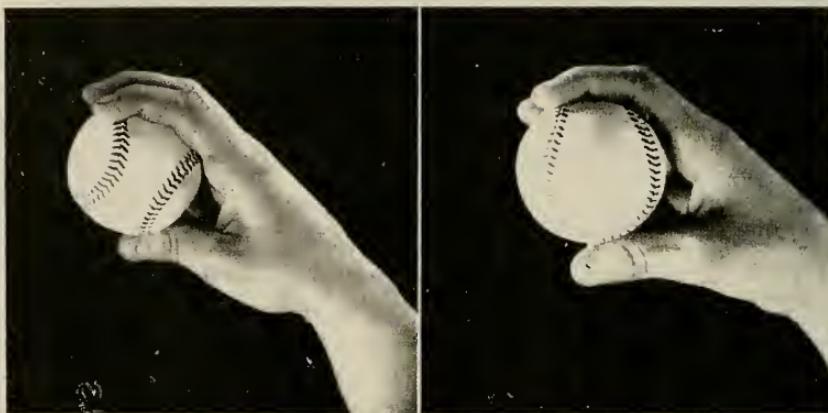


Fig. 35.—The fast ball.

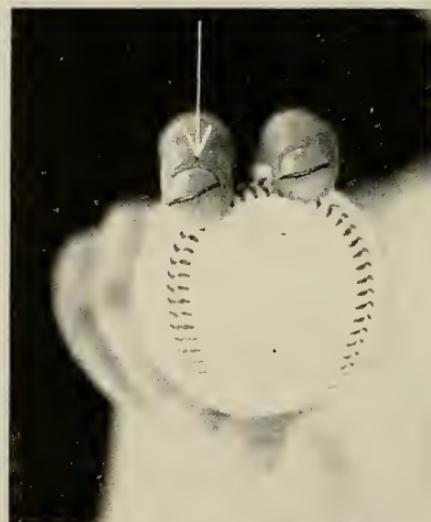


Fig. 36.—The finger pressure for the fast ball.

part. The thumb again is underneath, and the third finger along the side of the ball (Fig. 35).

Study indicates that the course taken by a pitched ball is determined by its rotation and the pressure developed in front of it. In the case of the fast ball, these are the factors which produce "hop." The fast ball is released off the ends of the first and second fingers, and since the second finger is longer, the ball will leave that finger last. Many pitchers have a natural hop on their fast ball; those who do not should practice releasing the pitch from the tip of the second finger on the side of the third finger. A slightly greater pressure exerted by the second finger as the ball is released gives it the rotation that makes it hop (Fig. 36). A definite wrist snap should be used as the ball is released. A good fast ball pitched straight overhand has a tendency toward a slight rise, because of the upward rotation of the ball on release, while a fast ball delivered from the three-quarter overhand delivery has a tendency toward a slight rise and sideward hop toward the right, if a right-handed pitcher delivers the pitch, and toward the left for a left-hander. The rotation of the ball in this delivery is three-quarters upward.

Similarly, a sidearm delivery will cause the ball to hop toward the right, if delivered by a right-handed pitcher; toward the left if the pitcher is left-handed. The rotation of the ball is sideward in the direction toward the side of release.

If at the time of release the palm of the pitching hand is turned slightly toward the ground, the ball will also sink. The rotation of the ball is now both sideward and slightly downward. A full underhand pitch will sink, since the rotation of the ball on release is downward. There are, however, few college, high school, or sandlot pitchers who are true underhanders.

The Curve Ball

The initial arm action in pitching the curve ball should be identical with that for a fast ball; likewise, the initial grasp of the ball is the same. However, as the windup starts and

the arms swing backward, the ball is often shifted so that the second finger has a good contact along a seam of the ball (Fig. 37). The ball is usually grasped much more tightly with the second finger (regardless of whether or not the pitcher's natural grip is relaxed or tight), with the first finger merely acting as a guide. As the pitching arm is brought forward, the thumb side of the hand and the wrist are turned outward with a snap. The ball is released over the first and second joints of the first finger. This release provides the rotation that makes the ball break. When pitched by a right-hander, with a three-quarter overhand delivery, the ball rotates downward and to the left. A three-quarter overhand left-hander's curve ball breaks to the right and downward. The sidearm curve rotates in only one direction—sideward—and therefore is more likely to be hit by the batter because of only one change in course.



Fig. 37.—The curve ball.

A full underhand curve ball is said to have a tendency to rise slightly, as well as break to the side. The rotation on release is upward and sideward, opposite the side from which it was released.

The Change of Pace

The change of pace is delivered with the same body and arm action as the fast ball, but it travels more slowly; as a

matter of fact, in the language of the ordinary fan, it is generally referred to as the "slow ball." In throwing the change of pace, some pitchers grasp the ball with their normal grip, producing the slowing action by the action of their fingers as they release the ball. In this method, the ball is held loosely by the first and second fingers, but grasped more tightly on the under side by the thumb. As the ball is released, the fingers are relaxed and straightened so that on the release the ball touches on the second joints of the first two fingers.



Fig. 38.—The change of pace or palm ball.

This pitch can also be delivered by another method in which the ball is grasped loosely, well back in the palm of the hand, and then delivered with very little pressure by the fingers. Either the first two fingers or the first three fingers can be on top of the ball. On release, the fingers are straightened and relaxed so that the ball touches only the upper joints of the fingers and the palm (Fig. 38). This is often called the palm ball.

A slow curve may be pitched by holding the ball very loosely and then, on release, permitting it to roll out over the second joint of the first finger, as in the ordinary curve ball pitch, the fingertips not touching the ball. The looser the grip, the slower the pitch.

OTHER TYPES OF PITCHES

The Knuckle Ball and Fingernail Ball

The knuckle ball ordinarily breaks in the same direction as the curve ball. In throwing this pitch, the ball is held against the first joint of the first finger; or against the first joint of the first and second fingers; or against the first joint of the first, second, and third fingers. The thumb and little finger, or other fingers, grasp the ball in the most natural fashion, depending upon whether the basic grasp involves one, two, or three fingers. The joints are placed on the smooth surface along the widest part of the seam, although not touching the seam, and the thumb is along the seams at their narrowest part. The fingernails are flat against the ball (Fig. 39). The pitch is released with a snap of the wrist and it slides off the fingernails.

If the fingernail tips are placed on the ball, it is customarily called a fingernail ball (Fig. 40). It is thrown the same as the knuckle ball except that on release the wrist is held more stiffly and the fingers are extended vigorously. The knuckle ball rotates very little; the fingernail ball rotates more. The vigorous extension of the fingers causes the ball to rotate forward and drop when pitched from an overhand delivery. Both overhand and sidearm pitchers may throw the knuckle ball and fingernail ball. As in all breaking pitches, the irregular course of the ball is caused by air pressure, and either of these pitches is more effective when pitched into the wind or with a cross wind. These pitches are usually slower than the fast ball and are hard to master. This may have some relation to the fact that they are generally associated in professional baseball with veteran pitchers.

The Fork Ball

The fork ball is another pitch associated chiefly with pitchers of considerable experience, and the beginner should not attempt to master it for some time. It can be thrown with either an overhand or sidearm delivery. The first and second fingers are spread wide and the ball is held between them; the phrase "fork ball" is a description of this grip. The fingers

Fig. 39.—The knuckle ball.



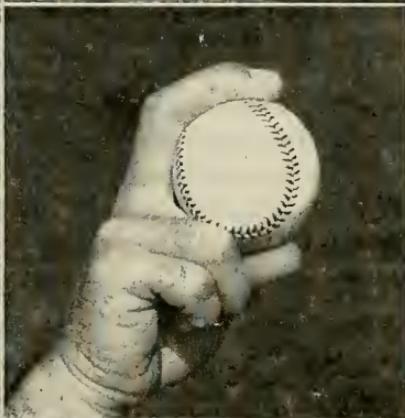
39.

Fig. 40.—The fingernail ball.



40.

41.



42.

43.



44.

Fig. 41.—The fork ball.

Fig. 43.—The slider.

Fig. 42.—The screw ball.

Fig. 44.—Another grip for the slider.

should not touch the seams, since the ball must slide from between them. The thumb is held underneath the ball (Fig. 41), touching the seam. There should be vigorous wrist snap in delivery. The fork ball usually breaks in the same direction as a curve, but, since it has little rotation, the build-up of air pressure along the seams is not so predictable, and occasionally the pitch will break in the opposite direction. Few pitchers ever have absolute mastery of the fork ball. Since it is normally thrown at reduced speed, it can be used effectively as a change of pace if properly developed.

The Screw Ball

The screw ball is held the same as a fast ball (Fig. 42); the chief difference lies in the actual delivery. The screw ball action is somewhat strained and unnatural, because the back of the hand is turned inward, toward the body, as the arm starts forward to deliver the ball. At release, the thumb pushes the ball outward as pressure is exerted by the second finger. The ball leaves the hand between the second and third fingers. On delivery, the back of the hand is turned to the batter and the arm and wrist are rolled inward, toward the body. The ball may be held tightly or loosely. When held loosely, the pitch will serve as a change of pace. A good screw ball pitch will break in the opposite direction from a curve ball because of its rotation, which is sideward and downward toward the side from which it is delivered. It is a pitch that is hard on the arm and should not be used by young and inexperienced players because of the unnatural muscle action. It is usually pitched overhand and with a decided wrist snap; it may, however, be thrown sidearm.

The Slider

The slider is pitched from an overhand delivery. To make it break to the side, in the same direction as a curve ball, it is delivered with a fairly stiff wrist, leaving the tip of the first finger on the thumb side. The second finger rests lightly on the ball, with the main pressure supplied by the first finger at the time of release. The ball is held with the first finger placed

on the outer seam at its narrowest part, the thumb contacting a seam underneath (Fig. 43). At release, the wrist is slightly turned in, causing the ball to rotate upward and slightly in the opposite direction of the side from which it is delivered.

Some pitchers who normally throw with a stiff wrist have a natural slider, or can develop one easily. For most pitchers, however, and particularly the beginner much practice is required. The slider can be pitched most effectively with a new ball, because of the smoothness of the cover.

Another way of holding the ball for the slider is shown in Fig. 44. When thrown with this grip, pressure is applied by the first finger and the thumb, which is held well under the ball.

TYPES OF PITCHERS

Although most pitchers have at least a small assortment of "stuff," they generally can be classified in terms of their favorite and most effective pitch. Each type tends to differ, in some respects, from the other and these differences condition their approach to the game.

The fast ball pitcher, the man who depends primarily upon his speed in throwing the ball past the batter, is probably the best-known. In their prime, such men as Walter Johnson and Bob Feller pitched one magnificent game after another on the old principle of "if he can't see it, he can't hit it." The sandlot and high school pitchers who strike out a dozen to fifteen men a game generally do it with the fast ball; the only other requirement is moderately good control. In college and professional baseball, such a pitcher will be more effective if he can develop a change of pace and a fair curve. These pitches also call for good control, but their chief effectiveness lies in the difference in speed. It should also be remembered that the change of pace should not be thrown to a poor hitter; since his timing is naturally poor, there is no percentage in giving him a better chance to get set.

The curve ball pitcher ordinarily has strong hands and a flexible wrist, the source of his ability to put lots of spin on

the ball. Curve balls generally are pitched low; thus the control of this type of pitcher must be better than that of a fast baller. Unless he happens to have a good fast ball, the curve ball pitcher will tend to use his fast one to catch the hitter off balance. Ordinarily, he should keep his fast ball low and away from the batter, over the outside corner of the plate.

The control pitcher is a little harder to define, but he usually is thought of as the possessor of neither a good fast ball nor breaking ball; he emphasizes pitching to the exact spot. If his control is sufficiently sharp, and he has an accurate knowledge of hitter weaknesses and a stable temperament, he can often get by with very little "stuff." One veteran major league pitcher was a twenty-game winner in the minors when he was crowding fifty years of age; he was almost entirely a control artist.

Ordinarily, the control pitcher does not try to strike out the opposing hitters, but makes careful use of different speeds and techniques in delivery to keep the batter off balance—and he doesn't waste a pitch.

How to Choose the Right Pitch

The pitcher should always try to get the first pitch to the first batter in each inning over the plate for a strike. This is simply percentage baseball; many coaches will instruct hitters not to offer at the first one, but look it over to gauge the speed. If the pitcher has a good fast ball, he should use it for this first pitch. The same principle can be followed on succeeding batters, provided there are no runners on base,

If, however, the batters start hitting the first pitch with good results, the pitch should be to the batter's weakness. If the pitcher is not sure of the batter's weakness, the pitch should be as low as possible at the edge of the strike zone, since there are fewer good low ball hitters than high ball hitters.

In most situations, depending on the batter and the speed with which the pitcher throws, the fast ball can be pitched high, inside and outside, and low, inside and outside (unless speci-

fied otherwise, use of the term "high," or "low," etc., refers to these areas *within the strike zone*).

The curve ball is usually pitched low and away from a right-hand batter if the pitcher is right-handed; inside and low if the pitcher is left-handed. A left-handed pitcher should pitch his curve low and away from a left-handed batter; low and inside to a right-handed batter. If, however, the pitcher has a good curve that breaks both to the side and down, and the batter pulls away from the plate in his stride, the curve ball can be pitched effectively by both left- and right-handed pitchers on the lower outside corner of the plate.

The change of pace or slow ball should normally be pitched low and away from the batter, regardless of the side from which he bats. All other types of breaking pitches should normally be pitched low. The screw ball is more effective if it is delivered low and over the outside corner of the plate by a right-handed pitcher to a left-handed batter. The same is true of a left-handed pitcher delivering the pitch to a right-handed batter.

How the Pitcher Takes Signals

The official baseball rules suggest that when the catcher gives the signal, the pitcher assume a position with one foot in contact with the pitcher's plate. This is designed to speed up the game. An inexperienced pitcher often takes his signal two or three steps behind the pitcher's plate and then, after receiving the signal, has to walk up to his pitching position; if instead he stands in contact with the plate, that much time will be saved.

The official rules also require the pitcher to have the ball in his possession at this time, since it is legally a balk if "the pitcher without having the ball stands on or astride the pitcher's plate." After checking the defensive alignment behind him to see that all players are in their proper fielding positions, and after checking the base runners, the pitcher is ready to take his signal.

Before the windup position there are two methods for taking signals:

1. The pitcher may take a position back of the pitcher's plate, with the toe of his pivot foot just behind the plate, the free foot behind or to the side of the pivot foot, the toe of the free foot about even with the heel of the pivot foot in a short, natural stride. The weight should be on the free foot, the ball in the pitching hand and hidden behind the body. As soon as the signal has been received, the pivot foot should be placed in its proper position on the pitcher's plate, with the free foot in a comfortable position back of, or to the side of, the plate. Then looking directly at the target, the pitcher is ready for his windup.

2. The second position is somewhat simpler. The pitcher places his pivot foot in the proper position on the pitcher's plate with the free foot back of, or to the side of the plate. In this stance, the weight is on the free foot. The ball is held behind the body (Fig. 45). As soon as the signal is given, the pitcher is ready to start his windup.

There are three ways to take signals for the set position:

1. With runners on first and third bases, the pitcher may take his signal from either of the above-mentioned positions, so as to be able better to observe each runner. As soon as he has the signal, the pitcher moves into the set position.

2. The pitcher may place the pivot foot against the front of the pitcher's plate with the free foot in a comfortable position out ahead. The weight should be evenly distributed on both feet. The arms should hang naturally at the sides, with the ball hidden from the batter in the pitching hand (Fig. 46). After the signal has been completed, the pitcher, as he moves into the set position, takes a last look at the base runner, who may at this time tip off his intention of stealing.

3. The pitcher may straddle the plate sidewise, so that the gloved hand side is toward the batter (Fig. 47). Subsequent actions are the same as in number 2, above. As soon as the pitcher has the signal, he steps into the set position.

A base runner may break while a pitcher is taking a signal with one foot in contact and the other ahead of the plate. Since the pitcher cannot watch a base runner while he is

Taking Signals

Fig. 45.—For the windup position; also with runners on first and third.



Fig. 46.—For the set position (pivot foot in contact with plate).

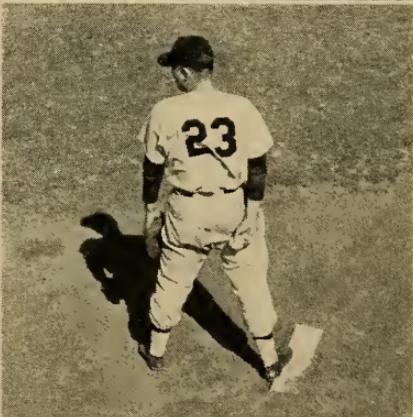


Fig. 47.—For the set position (straddling the pitcher's plate).



actually taking the signal, this responsibility is the first baseman's. This player should shout "there he goes!" or whistle or provide some other kind of appropriate signal if the runner breaks. The pitcher should immediately step backward off the plate with his pivot foot and make his play on the runner. This will eliminate the possibility of a balk. (A balk is committed, according to the rules, if "the pitcher while touching his plate feints a throw to first base and fails to complete the throw.") A runner may also start, then stop and start again, in an endeavor to draw a feint throw from the pitcher while he is in pitching position. When this occurs all the above actions should be carried through the same way.

CONTROL

Control is the pitcher's ability to pitch the ball to a chosen target. Operationally speaking, it is the ability of the pitcher to make the batter hit the pitch he wants him to hit. A pitcher can gain control only by constant practice, and by concentrating on his target before he starts his delivery. He should always have a mental picture of the course he wants the ball to follow before he starts his initial move, and he must keep his eyes on the target throughout delivery. This is the pitcher's equivalent of the old "keep your eye on the ball" maxim, and its importance cannot be overstressed.

A pitcher's position on the rubber may easily affect his control, even though he does not realize it. If he consistently pitches toward the third base side of home plate, he should move his pivot foot toward the first base side of the rubber, regardless of whether the batter is right- or left-handed. If he consistently pitches toward the first base side, he should move his pivot foot toward the third base side of the rubber.

If his pitches are consistently high, a slightly shorter stride in delivery will bring the ball down; if his pitches are consistently low, lengthening the stride will bring the ball up. If this does not help, the pitcher should request his catcher to shift the target (the catcher's glove) to compensate.

HOLDING A RUNNER ON BASE

With a Runner on First

Ordinarily, a pitcher should make a throw to first base when the runner has too long a lead, or when a steal or hit-and-run play is anticipated. Such a throw will sometimes pick off the runner; at least, it will keep him close to the bag, putting a crimp in any larcenous intentions. Many inexperienced pitchers do not throw to first base often enough. Often a beginner will make one throw, more or less as a matter of routine, and let it go at that, when another throw or even a third might sometimes pick off the runner. If the runner on first has to slide to get back, another throw should always follow.

In throwing to first base from the set position, the right-handed pitcher should simultaneously shift his weight to the left foot, bend his right knee, raise the heel of his right foot, and turn toward first base on the ball of the right foot. The weight then is shifted to the right foot, followed immediately by a step with the left foot directly toward first base as the throw is made. These movements are continuous, even, and quick. A pitcher may gain speed by making a jump shift—hopping into position with his right foot and stepping out simultaneously with his left as he makes the throw.

The left-handed pitcher is facing directly toward first base, and merely steps toward the base with his right foot as he makes the throw. For either right- or left-handers, the target for the throw should be the right knee of the first baseman, who will be facing the pitcher.

In working from the set position, many pitchers make a different initial move in throwing to first base than in delivering to the plate, and the inexperienced pitcher's awkward handling of this action often tips off a base runner. As an example: many right-handed pitchers make an initial move with their shoulders, arms, body, legs, or feet before pitching to the batter, but always lift the right heel as the initial move to throw to first base. This gives an advantage to the base runner, who by watching the right heel will know when the

throw is coming to first base; if the heel does not lift, he will know the pitch is to go to the batter. He is then in position to get a good start in an attempt to steal second, or is able to get back to first if the throw comes there.

When the pitcher has such a fault, the same initial move should be developed and used for the throw to first base as he uses in delivering to the batter. This move should be slight and natural, and so coordinated with the throw to first that it cannot be called a balk.

Here are some typical initial moves made in delivering the ball to the batter:

1. Dropping the back shoulder slightly as the weight shifts to the back foot.
2. Raising the front elbow slightly as the delivery starts to the plate.
3. Bending the rear knee as the delivery starts to the plate.
4. Raising the heel of the front foot before it lifts from the ground in the forward stride toward the plate.

Some pitchers can develop a good initial move; some cannot. For the pitcher who has trouble in this respect, one of the easiest initial moves to learn is a slight, quick lift of the rear heel, followed by a driving back of this heel against the pitcher's plate. Any further moves in delivery come so quickly that the runner is unable to take advantage. Thus the first movement is always a lifting of the rear heel, regardless of whether the ball goes to the batter or to first base.

Unless a pitcher has been taught otherwise, he will tend to work in definite rhythm, so much so that it can be reduced to a regular cadence count; for instance, one-two-three-four-five. If an alert base runner gets this count and starts his break on "four," he will have several steps toward second base before the pitcher delivers the ball to the plate. The pitcher must therefore vary his count, pitching on the third, fourth, fifth, or even sixth beat; he should also throw to first base on a similarly varied count.

Many base runners have careless habits upon which an alert pitcher can capitalize. When forced back to the base

by a throw, some runners will lead off again as soon as the first baseman returns the ball to the pitcher. This kind of runner can sometimes be caught by a quick return throw made before the pitcher steps onto the pitcher's plate, or just as he turns toward the plate after receiving the ball.

If, as the base runner takes his lead, he uses a crossover step instead of a glide, the right foot leading the left, an alert pitcher can sometimes pick him off. In this case the throw should be timed to arrive just as the left foot crosses in front of the right. The runner must take another step with his right foot before he can recover and return to the base.

When the pitcher takes the set position and the runner starts for second base, the pitcher should step off the pitcher's plate with his rear foot, before breaking his hands, to avoid committing a balk. He should make his turn directly toward the runner. If the runner stops, the pitcher should immediately run directly toward him, making him commit himself toward first base if possible. If he can tag the runner without a throw, so much the better, but this is rather unlikely. As the pitcher charges off the mound, the second baseman should run forward on the baseline ready to take a short throw. If the runner breaks toward first and the pitcher throws to that base, he should immediately back up first base on all rundowns until some other fielder can take his position. He then drops out of the play, to conserve his energy.

When there are runners on first and third bases, the pitcher—particularly if he is inexperienced—will sometimes find himself confronted with the double steal. When one run is critically important, some teams use this as a set play. The man on first breaks for second; if he draws an immediate throw, the man on third can often score. When a runner on first breaks in this situation, the pitcher should step off the plate in the fashion described above, but his turn should be made to the right, permitting a quick look at the runner on third before committing himself to a throw. Generally this is sufficient to hold the man on third, and full attention can

be given the runner breaking from first. Incidentally, this procedure of stepping back off the plate should be used any time the pitcher has to break his hands after assuming the set position. The only exception is when time is called, and then the pitcher is permitted to step off the plate in any manner he chooses.

When first base is occupied and second base is open, the pitcher should assume the set position in all cases except the following: ninth inning, two men out, with the pitcher's team three or more runs ahead. In this case, obviously, the pitcher may take his windup, ignoring the runner and concentrating all his efforts on the batter to keep him from reaching base safely.

With a Runner on Second Base

When second base is occupied, the pitcher assumes the set position, placing his front foot more directly in line with home plate, as indicated before. In making the throw to the base, the pitcher should make the long turn—a right-handed pitcher turning left, and a left-handed pitcher turning right. The base runner is more likely to assume that the pitch is going to the plate than if the short turn is made. (The official rules require that, before making a throw to second, the pitcher must step directly toward that base.) He may, however, turn and make a feint to throw.

Some pitchers cannot learn to make the long turn effectively. If they cannot, they should use the short turn—a right-handed pitcher turning right, a left-handed pitcher turning left. If at any time the runner starts for third base and stops, the turn should be made to the right for both left- and right-handed pitchers. The pitcher should again run directly toward the runner, making him commit himself.

When both second and third bases are occupied, and the runner on second starts for third, the pitcher should immediately throw to the shortstop or second baseman, whichever is covering second base. This player should then force the runner to third. If the runner on third base then breaks for home, he should be played.

The long turn is particularly effective when the pitcher-to-shortstop or pitcher-to-second baseman pick-off play is involved. The runner on second base will sometimes lean toward third as the pitcher begins the long turn, again assuming that the pitch is going to the batter.

Picking Off the Runner at Second

The pick-off play is worth considerable discussion, since it can be extremely effective in games in which the score is close. The great Bob Feller might not have lost a close World Series game had a pick-off play worked; its failure to do so, and the hair-breadth call on the play, provided hot stove material for the entire next winter.

The pick-off at second must be practiced, so that the pitcher, shortstop, and second baseman have perfect coordination and timing. It can be executed in several ways: (1) The jockey pick-off, (2) the time pick-off, (3) the block pick-off. The shortstop is the key to the play, and if he feels there's a chance to catch the runner he should call it, but only if catching the runner will have an important bearing on the game. If the defensive team is runs ahead (that is, if their run margin is greater than the total runs represented by offensive players on base and at the plate), the pick-off normally should not be used, since the offensive base runner will customarily play safe.

1. *The Jockey Pick-Off.* The shortstop breaks two or three steps behind the runner toward second base to initiate the play. The pitcher glances at the shortstop who stops and then continues on to the base; the pitcher should whirl as the shortstop starts the second time. The long turn by the pitcher is preferable. This will time the play so that the ball and shortstop reach the base at the same time. Should the shortstop start and then go back to his position, the pitcher glances at the second baseman who has taken two or three steps toward second, and then breaks in if there is a play. If the second baseman does not go in, the pitcher delivers to the batter. It should be understood that there will be only one break and then a carry through, or a direct carry through. Knowing

this, the pitcher will not pitch with either fielder out of position.

2. *The Time Pick-Off.* This play is "put on" by signals. The shortstop, again, initiates the play, giving a signal; the pitcher answers. The pitcher moves into his set position, and as his arms come to rest in front of the body, the shortstop goes into second base. The pitcher should not watch the shortstop; instead he focusses on the batter and starts counting as he comes to the set—one, two, three—and on the "three" count whirls and throws to the base. Timing is important in all pick-off plays and particularly so in this one.

3. *The Block Pick-Off.* Again the play begins with the shortstop, who goes into the base behind the runner, at three-quarter speed. As he starts back to his fielding position, he cuts in front of the base runner. The second baseman takes several steps toward second as the shortstop goes into the base; as the shortstop hurries back to his original position, the second baseman rushes all the way in. The pitcher glances at the shortstop; his passing in front of the runner is the signal for the pitcher to whirl and throw to the second baseman. This gives the correct timing.

In plays where the shortstop takes the throw, he should receive it knee high and slightly toward the third base side of second base. He is moving into the base, and will be on the base before he can stop. At the same time, the possibility of hitting the runner will be reduced. When the second baseman takes the throw on a pick-off play, the ball should be delivered at the same height, but slightly toward the first base side of the base. His momentum will carry him to the base as he catches the ball.

With a Runner on Third

With the score tied, the squeeze play is a possibility. The pitcher is the only player who can break up a straight squeeze play. When a right-handed batter is at bat and the base runner makes his break for home plate, the pitcher should make his pitch at the hips of the batter. The batter is not only driven away from the plate by such a pitch but it also puts

the catcher in good position to tag the runner. At the same time, this pitch will be hard to bunt. The batter will be moving to avoid being hit by the pitch.

An experienced pitcher with good control can also pitch high and inside under these circumstances quite effectively. It is important to note, however, that the so-called "bean ball"—a ball thrown directly at the batter's head—should not be used.

If the squeeze play should be played with a left-handed batter at bat, the pitch should be low and outside—away from the batter. This pitch will also be hard to bunt, and it will put the catcher in good position to tag the runner as he comes in.

The catcher and pitcher should understand that regardless of the pitch that may be originally called, when the squeeze play breaks, the pitch is automatically changed to a fast ball.

On a straight steal of home, the pitch should be made to the same areas as indicated above for the right- or left-handed batter. If, however, there are two strikes on the batter, the pitch should be a strike. As the runner nears the plate, he will have to slow down, since the batter will have to swing at the ball or be called out. If the batter does not swing, the catcher has a little more time and is in good position to tag the incoming runner. With a two-strike count, the pitcher should not automatically change his pitch to a fast ball, but instead he should throw the pitch originally called for. A change of pace obviously should not be called if there is possibility of a squeeze play or steal of home.

HOW THE PITCHER WARMS UP

It would be difficult to overemphasize the importance of the pitcher's warming up properly before the game. During this period, he not only must bring his body efficiency to its highest peak, but also must get the proper mental set toward the assignment ahead of him. The average pitcher, therefore, should be given a certain amount of personal leeway in warm-up procedure, since he not only has to be ready to pitch, but also must *believe* that he is ready.

The length of time for the warm-up depends upon the individual, and, to a large extent, on the weather; ordinarily it takes from seven to fifteen minutes. A loose, light-muscled pitcher usually requires less time than a man of heavier build. A pitcher who at one time or another has strained his pitching arm will require more time to bring his muscles up to the proper tone; he must work more easily for a longer period. On a warm day, the muscles respond more quickly than on a cold one, when more pitches are required to do the job.

Before going on the field on a cold day, the throwing muscles of the pitcher can be loosened by light massage with a rubbing oil—mineral oil or petrolatum can be used. This oil will act as an insulation and help keep the arm warm. For added warmth, a wool sweat-shirt should be worn.

The pitcher should not throw a ball at all until he is ready to start warming up. He should start with a few close pitches, more or less lobs, and gradually move back to the regulation distance. So that his control will not be hindered, the remainder of the warm-up pitches should be made from this distance, and in the same direction as in the ball game. A cross wind or a wind blowing with or against the pitch will have an effect on it, and the pitcher should get the feel of any such action before the game starts. This is particularly true in throwing any kind of breaking pitch.

The first pitches should be easy straight balls, with a gradual increase in speed. When the pitcher feels that his arm is loose enough, he should start delivering any other types of pitches which might be thrown in the game, at first easily and then with a gradual increase in speed. When he changes from the straight ball to any other kind of pitch, he should tell his catcher. This will avoid the possibility of injuring a finger or hand of the catcher who may be unprepared for the switch.

After the first few pitches, the catcher should set his glove as a target, waist high and directly over the plate. As the warm-up progresses and other types of pitches are involved,

the target should be changed to high and low over the inside and outside corners of the plate.

During their warm-up many young pitchers do not throw enough pitches from the set position. As a result, they often lose their control in the game when they must work with men on bases. As soon as the arm is properly warmed up, at least one-half of the pitches should be from the set position. This procedure may be varied, of course, in the case of the experienced pitcher who will need to throw only enough pitches from this position to get the feel of it.

The warm-up should be finished with several breaking balls followed by six or seven fast balls delivered at top speed.

On a hot day, the warm-up period should be timed so that the pitcher will have a few minutes of rest before the game starts. Towels should be available so that perspiration can be removed from the face, neck, and hands. On cool days, some pitchers prefer not to rest after their warm-up, so as to eliminate any possibility of cooling off. If the pitcher does rest, he should be careful to wear plenty of clothing, with particular attention to the throwing arm. The same thing is true of the rest period between innings.

When the pitcher goes to the mound for his turn, he is entitled to eight warm-up pitches. The first few to the catcher should be at medium speed; this will loosen up the muscles. Then, after throwing a breaking ball or two—always informing the catcher in advance—he can end the warm-up with a good fast ball pitch. One or two pitches should be delivered from the set position during the mound warm-up. It is not necessary to take the eight warm-up pitches, and the choice is up to the individual. On a cold day, however, the full number of practice throws should be taken.

The Relief Pitcher's Warm-Up

A good relief pitcher is a valuable asset to any team, and the best ones have saved more ball games than many second-rate starters. Some teams carry a few squad members for this particular duty; others, in semi-pro and amateur baseball,

are frequently forced to use regular starters on their off days. So far as the actual game situation is concerned, the relief pitcher's preparation does not differ in thoroughness from the starter's. He should warm up sufficiently as the game starts, so that he will require only eight or ten pitches to be ready when he is called upon. Whenever the game situation indicates that he is likely to be called, he immediately should start to warm up again. This may happen several times during a game, and one of the particular problems of the pitcher with a relief assignment is to bring himself quickly to the point of greatest pitching efficiency after a half-dozen false starts. If he must pitch from the set position when he goes to the mound because of runners on base, which is generally the case, he should pitch his warm-up throws from this position.

When he goes on the mound, the relief pitcher should have all the necessary information about the game situation—the score, the inning, the runners on base, and the call on the batter.

THE FIFTH INFILDER

The moment the ball leaves his fingertips on its way to the batter, the pitcher becomes the fifth infielder. His ability to handle batted balls and to diagnose play situations is sometimes as important in winning or losing ball games as his ability to clip the corners with his fast one. In the course of a single play, he may be required to deliver the pitch to the batter, handle the batted ball, make a throw to the appropriate base, cover another base, and finally back up the play. His failure to do any of these things properly might completely destroy the effect of throwing the proper pitch in the first place. The pitcher is not only the fifth infielder; he also must be a good one.

As the ball is delivered, the pitcher swings into his fielding position, as described previously; well-balanced, feet spread, ready to go in any direction. When there are no runners on base and a ground ball is hit hard and directly to him, the pitcher should take one or two steps toward first base after

fielding the ball. This, in effect, gives him something to do while the first baseman is running to cover the bag. Standing and waiting for the first baseman to get into position to receive the throw sometimes causes a pitcher to become tense, and the result is a bad throw. The throw should never be lobbed, but should be thrown with reasonable speed and as soon as the first baseman reaches the base.

The pitcher should remember that on slow ground balls it is almost impossible to make a play at second or third base on an advancing runner. Ordinarily, the runner starts with the pitch, and if the pitcher has to take three or four steps off the pitcher's mound to field a ground ball the runner will beat the throw to either of these bases. A good rule of thumb for most pitchers to follow is always throw to first base any time they are pulled off the mound in fielding a ground ball—unless the catcher, who generally has the best view of the total play situation, calls for a throw to another base.

When a ground ball is fielded by the pitcher, and a base runner who has made a break stops running between bases, the pitcher should play him by running to a point slightly ahead of him. If the pitcher can tag the runner, he should do so. If not, every effort should be made to drive the runner back to the base from which he came, with the throw for the possible put-out going there. The pitcher should never permit a runner to advance toward the next base if he can prevent it.

Fielding Bunted Balls

If a right-handed pitcher fields a ball bunted close to the third base line, and the throw is to first, he should move quickly to a position directly in front of the ball, sliding the inside edge of his right foot on the ground and straightening the right leg for a brace. As the right foot slides out and the leg straightens, the foot should turn so that the spike of the shoe digs in. The pitcher stops and is set to throw in one step. If he fields a bunted ball close to the first base line, he should try to field the ball in front of his right foot. He

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then can make a quarter-turn to the left, followed by a step toward first base as the throw is made.

A left-handed pitcher usually fields a bunted ball close to the first base line in front of his left foot. His pivot, then, should be to his right as he makes the throw. In many cases, the pitcher's back will be toward first base as he fields a ball bunted along the third base line; the pivot then should again be made to his right. If, however, he can get in front of the ball as he takes it, his turn should be to the left.

The sacrifice bunt is frequently called when there are runners on first and second bases with none out. Some teams simply concede this, so to speak, but an alert pitcher can sometimes foil it by getting a force-out at third (see also Ch. 8, Play of the Shortstop). In this situation, the pitcher delivers the ball and immediately rushes toward the third base line to field the bunt if, as is likely with the right-handed batter, it is placed in that area. He will have taken only two steps by the time the ball is bunted, and will be able to recover should the ball be bunted back through the box. When he fields the ball, his first objective should be a throw to third, using the shortest turn to make his throw. The catcher, with his broader view, should call a throw to first if there is no possibility of a play at third.

Occasionally, an attempted bunt will end up as a short "bloop" fly ball which the pitcher must handle. Ordinarily, however, he should not attempt to catch any fly ball which any other infielder or the catcher can handle. If the situation does arise where he must handle a fly, the pitcher should call loudly for the ball, to avoid interference.

Throwing to Bases After Fielding the Ball

When the pitcher fields a ground ball near the first base foul line, and the throw is to go to first, he will ordinarily aim the throw slightly to the left (the second base) side of the bag. It is the first baseman's job to take a position, if possible, with his left foot on the second base edge of the bag, his right foot inside the diamond on a line between first and second. This gives the pitcher a good target, and leaves less

chance for a collision on the bag. (See also Ch. 6, Play of the First Baseman.)

When the pitcher fields a ground ball on which a play can be made at second base, and the shortstop is covering, the throw should be a short stride to the third base side and chest high. When the second baseman covers, the throw should be a short stride toward the first base side of second base. Should either infielder reach the base before the throw starts, the throw should be directly to the base.

After fielding a ground ball, the pitcher should make the shortest possible pivot to throw to first or second base. For example, a left-handed pitcher fielding a ground ball to his left and slightly toward home plate will make his turn to his left to throw to first, and when he fields the ball in the home plate area, he usually will turn to his right, since in most cases the ball will be fielded in front of the left foot. If a throw is to go to second base, a left-handed pitcher should pivot to his right on any ball fielded in front of him, while a right-handed pitcher should turn to his left as he throws to either first or second.

The left-handed pitcher makes his turn to the right on any throw to third base. When a right-handed pitcher fields a ball close to the third base line and his back is turned toward third base, he should pivot to his left for the throw. If, however, he is facing or partially facing third as he fields the ball, he should turn to his right.

The type of throw is pretty much dependent upon the play. On a quick play, the pitcher will have little choice, and will have to throw from whatever position in which he fields the ball. This may be an underhand or sidearm throw. When the play is not hurried, he should use his normal throwing motion.

The speed with which a pitcher throws to a base is dependent primarily on the distance. Long throws should be hard, for the sake of both carry and accuracy, while closer throws can be reduced in speed to make it handier for the receiver. Except under unusual conditions, the lob throw should be

avoided; it often is not accurate under pressure, and the change in speed sometimes confuses the player who has to catch it.

COVERING THE BASES—WHEN AND HOW

Covering First Base

When any ball is hit to the left of the pitcher, beyond his own fielding range, he should immediately start to cover first base. He should stop his run only if the ball goes through the infield, or the first baseman is able to cover. When the first baseman can cover or make the play himself, he should wave the pitcher off or call to him.

The pitcher can follow two courses in his run to first base.

1. When there is time and the ball is fielded cleanly by the first or second baseman, the pitcher should run toward a point two or three strides from first base on the home plate side. He makes a turn just before reaching the base line which brings him around to face the infielder making the play. His run continues to the base in fair territory and parallel to the base line. The pitcher should receive the ball a good stride from first base, so that he will have time to locate the bag after catching the ball (Fig. 48). Running parallel to the line also helps avoid colliding with the runner on a close play. After stepping on the base for the put-out, the pitcher should come to an immediate stop not more than two steps past the bag, and off the base line, stepping into the infield if possible. He then follows up by rushing into the infield, ready to make a play on any other base runner if other bases are occupied.

2. The pitcher should run directly to first base as quickly as possible when: the batted ball is a slow grounder; the ball is fumbled by the first baseman; there is a play to second base for a force-out and the first baseman cannot reach first base in time. As soon as the pitcher reaches the base on his direct run, he should stop, place one foot on the second base side of the bag, and step out to take the throw. As soon as he makes the catch, he should step off the base and into the infield.

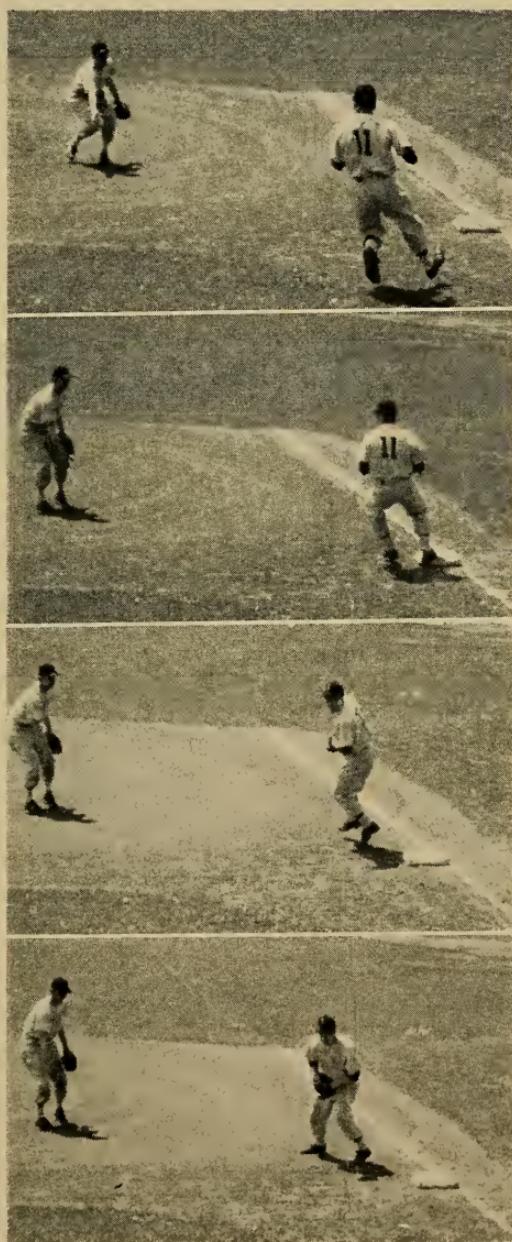


Fig. 48.—Covering first base.

Covering Second Base

Should the second baseman and shortstop both go back after a fly ball and leave second base open, the pitcher should cover, provided neither the third baseman nor first baseman have already done so. If either of the latter cover second base, the pitcher covers either third or first, whichever has been left open.

Covering Third Base

When there is a runner on second base and both the shortstop and third baseman go back after a fly ball, the pitcher should cover third base. This is not a common play situation, but it may occur when a strong cross-wind is blowing and neither infielder knows at the time the ball is hit who will be in the best position to field it.

When first base is occupied and a slow ground ball is hit along the third base line which the third baseman fields, the pitcher should cover third. This is provided, of course, that the third baseman cannot get back to the base, or the shortstop or catcher fails to cover. If the catcher covers third, the pitcher should cover home plate.

Covering Home Plate

When runners are in scoring position, on second or third base, and a ball gets away from the catcher, the pitcher should cover home plate. Sometimes there are ground rules concerning automatic advancement of the base runners in case the ball hits the backstop or an obstruction, but otherwise it is the pitcher's responsibility. The pitcher also covers home plate when third base is occupied, there are less than two outs, and the catcher leaves his position in an attempt to catch a foul fly ball. If the pitcher fails to cover in this situation, the runner on third might easily score after the ball is caught, since the rules provide that any runner may advance after such a fly ball has been fielded.

In taking a throw from the catcher for a play on a runner coming into the plate, the pitcher should take a position in

fair territory just in front of the plate and facing the catcher. If the throw is accurate, the pitcher will ordinarily make his turn to the right to tag the runner. Should the throw be wide, the pitcher should dive for the third base side of home plate after catching the ball, if he has a play on the runner.

OTHER PLAY SITUATIONS

These other play situations also involve the pitcher:

When First Base Is Occupied and a sharp single is hit through the infield and fielded cleanly in the outfield, the pitcher backs up third base. He should take a position well back of the bag, in line with the throw-in, so if the ball gets past the infielder who is covering, the pitcher will have ample space and time to retrieve the ball. On a long single or fumbled ball in the outfield, the pitcher must make a quick decision concerning the possibility of a throw going to second. If so, he should back up that throw.

When Second Base Is Occupied and a single is hit to the outfield, some coaches prefer to have the pitcher act as a cut-off man. This defense is often used when the backstop is close to home plate and the established ground rules allow a runner to advance only one base if the ball passes the catcher and hits the backstop.

He places himself in line with the throw from the outfield to the catcher approximately sixty feet from home plate. As the throw comes in, the catcher advises him to "let it go" if there is a play on the runner. If there is no play the catcher advises him to "cut it off," in which case the batter-runner is played at first base, if he makes a long turn and attempts to go back, or at second base, if the batter-runner continues on to that base.

Fielding Drills

Regardless of his experience, each pitcher should take fielding and throwing drills. A close game may be lost because of his failure to cover first base, his inability to field a batted ball or make an accurate throw. Many coaches work out their

own drills, of course. By way of suggestion, the following system gets good results:

A circle three or four feet in diameter is drawn a stride or two past first base and about five feet inside the foul line, in fair territory. A similar circle is drawn in foul ground. The infield positions are manned with first base territory covered by the regular first baseman. This is important because the pitcher and first baseman must learn to work together, so that compensating for individual differences becomes automatic.

All pitchers on the squad line up behind the pitcher's plate, with the first one in line on the plate. A hitter with a fungo bat takes a position in the batter's box.

To begin the drill, the pitcher goes through the actions of his normal delivery, with particular emphasis upon ending in the proper fielding position. The fungo hitter knocks a ground ball to the first baseman, simulating game play. As soon as the ball is hit, the pitcher runs to cover first base. After he takes the throw from the first baseman and touches the bag, he tries to stop in the circle in fair territory, whirling toward the infield and making a throw back to home plate or any other base which might be designated. Should the throw be wide, so that the pitcher in making the catch is pulled into foul territory, he stops in the foul territory circle, whirls and makes his throw.

As the drill continues, ground balls should be hit to the first baseman's left, right, and directly at him, so that all possible plays can be made at the base. The pitcher should always attempt to take the throw, tag the base, and make his turn within fair territory; if this is not possible, he should go no farther into foul territory than the area of the circle. After he completes the play, the next pitcher steps up for his turn.

After each pitcher has covered first base several times, he should practice fielding fungoed ground balls and throwing to whatever base is called.

In the next step, the plays are varied, so that the pitcher will not know until the ball actually is hit whether he is to field

a bunt, a ground ball, or cover first base. As training and practice develop through the season, the score, the runners on base, the number of outs, and the inning should be called before the pitcher starts his delivery. The play should always be called by the fungo hitter. On occasion, runners may be placed on the bases to further simulate game conditions.

These drills should be practiced from time to time until the pitchers are well drilled in all play situations.

POINTS TO REMEMBER

Finally, here are some miscellaneous points on the fine art of pitching baseball which it might be well to remember:

The pitcher should never deliver the ball to the plate when an infielder is faking a play on a runner; in case the pitch is hit, the infielder will be out of fielding position.

When a runner is caught off first, the pitcher should back up this base until another player can take his place.

In batting practice, the pitcher should occasionally practice turning and throwing to second base when he catches a ball hit directly to him.

The pitcher should know where his infield and outfield are playing at all times. He should know the out, inning, score, and call on the batter.

He is responsible for any open base, if not covered, for backing up throws, from the outfield or in rundown, and for backing up the play closest to home plate, if there are two possible plays.

The pitcher should always cover first base on any ball hit to his left.

The pitcher should have signals and plays with each infielder.

The pitcher should frequently practice holding runners on first and second bases. As long as a runner has to slide to get back, the pitcher should keep throwing to the base for a possible pick-off. If he expects a steal, it is good baseball

to throw to a base more than once, particularly if the base involved is first.

The pitcher should not overdo his warm-up before a game, or he may tire in the late innings.

A SCHEDULE FOR TRAINING AND CONDITIONING

Early Season

This schedule of practice covering the early season for pitchers is presented as a guide. It can, and should, be varied according to the length of the early season, the experience and age and physical condition of the pitcher. Immature pitchers should reduce the running and physical work to fit their ability, and the veteran will probably have developed some procedures of his own which are particularly useful to him. In a situation where there are only a few weeks of early season practice before the first game, the schedule will necessarily be accelerated; where practice can start in mid-February, indoors in cold and outdoors in warm climates, the schedule can be spread out.

Roughly speaking, the pitcher who reports in good condition should be able to pitch a full game after four weeks' training. His control may not be as effective as it will be later and his breaking pitches may not perform as well, but he should be ready both physically and mentally. Obviously, he should also make steady improvement throughout the season. The development of endurance, along with the learning of new skills and the improvement of old ones, should be stressed during the early period of training. For endurance, running, throwing, and exercises for agility are important. All pitching and throwing should stress control and accuracy.

The following schedule is set up for a four-week period of outdoor training and for a squad that has six or more possible pitchers.

FIRST WEEK

Monday

1. Start the workout by jogging the equivalent of 440 yards.
2. Spend five minutes on exercises: (a) Sit-ups and leg rais-

ing while lying on the back, (b) wrist and forearm exercises, (c) trunk twisting, trunk bending, (d) push-ups, (e) alternate toe touching from upright position, feet spread. For detailed information on these drills see Ch. 23, Conditioning and Training.

3. Ten minutes of "pepper."
4. Ten minutes of pitching over the middle of the plate: the fast ball at one-half speed, stressing control. Five minutes of this time should be spent pitching from the set position.
5. Jog 440 yards and follow with shower.

Tuesday

1. Jog 100 yards, walk 50 yards, run 50 yards, then walk 50 yards again. Alternate these four times.
2. Five minutes of calisthenics, as indicated above for Monday.
3. Ten minutes of "pepper" for agility.
4. Twelve to fifteen minutes of pitching over the middle of the plate at one-half speed. Half of the pitches should be delivered from the set position.
5. Alternate running and walking 50 yards, each four times. Follow with shower.

Wednesday

1. Follow the same schedule as on Tuesday, except that the pitching speed should be increased to about three-fourths of full power.

Thursday

1. Run 100 yards at three-fourths speed. Alternate the walk and run of 50 yards each, increasing the run almost to a sprint.
2. Five minutes of exercises. These may be varied, according to preference, but they should stress stretching and loosening calisthenics.
3. Fifteen minutes of pitching at three-fourths speed; one-half of the pitching from the set position.

4. Finish the day's work by walking 50 yards, sprinting 50 yards; alternate four times. Shower.

Friday

1. Jog approximately 200 yards, walk 100 yards, run 100 yards at almost full speed. Walk 100 yards.
2. Five minutes of exercises.
3. Fifteen minutes of pitching at three-fourths speed. If the pitching arm feels right, finish with six to eight fast balls at near full speed.
4. Twenty minutes of covering first base, fielding batted and bunted balls, and throwing to various bases, (*see Fielding Drills, above*). Stress speed in covering and fielding, as well as in throwing quickly.
5. Alternate walk and run, 50 yards each, four times. Run at sprinting speed. Shower.

Saturday

Follow the same program as for Friday, but include six or eight curve balls and changes of pace in the pitching work-out. The breaking pitches should not be over half-speed.

The catcher should start setting his target on the corners of the plate, high and low, inside and outside.

Note: If muscle soreness occurs and is not relieved by a workout, a whirlpool bath at 105° to 110° water temperature for about ten minutes, or a tub bath at the same temperature, will usually aid in reducing the soreness. If the throwing muscles, in particular, are sore and stiff and are not loosened by throwing, heat should be applied and the arm rested. Some soreness, of course, is bound to occur during the first few days of practice.

Sunday

Most schools and colleges do not hold practice on Sunday. For teams that do, a suggested program consists of a thorough warming-up, followed by 15 to 20 minutes of pitching practice with the emphasis on control.

SECOND WEEK

Monday

1. Alternate running and walking routine described above, taking the last two running units at sprint speed.
2. Take five minutes of exercises.
3. Batting practice starts, with the rest of the squad reporting at this time. The starting batting practice pitcher should warm up and pitch for a period of 15 to 20 minutes at three-fourths speed. He should throw the fast ball, for the most part, directly over the plate; ten or twelve curve balls should also be interspersed, with the pitcher telling the batter in advance when the curve will be pitched. This will help the batter in timing his swing.

After the pitching workout, the batting practice pitcher should take his turn at the plate, and another pitcher take his place on the mound.

4. When not batting or pitching, the pitcher should hit fly balls or go to the outfield and field flies and ground balls. In cases where the pitching staff consists of more than six candidates, all but the pitcher throwing batting practice should form a group of their own. Each should take a short turn hitting fly balls to the other pitchers; hitting helps develop the muscles used in throwing. These fly balls should be hit so that the pitchers in the field have to extend themselves in chasing them.

On teams which have only two or three pitchers, other players will have to pitch batting practice. Substitute players who have good control in throwing should be used, if possible.

If the time allotted for batting practice does not permit all the pitchers to take their turns pitching, those not involved should take their workout in pitching as in the first week, then take their turn pitching to batters the following day.

Tuesday, Wednesday, and Thursday

1. Follow general schedule as set up on Monday, each pitcher throwing at least 15 minutes.

Friday

1. The first practice game. After preliminary running and calisthenics, a six inning game should be set up, with the two best pitchers working three innings each. Immediately after his turn on the mound, each pitcher should take his customary running drill to taper off. Pitchers not working the game should follow the general conditioning routine.

Saturday

1. Practice game. Same procedure as Friday, using the other pitchers available.

THIRD WEEK**Monday**

1. Nine-inning practice game. After the usual preliminary conditioning routine, two pitchers should work five innings; two pitchers, four innings. After his turn on the mound, each working pitcher should taper off by running. Other pitchers follow general conditioning routine.

Tuesday

1. The pitchers who did not work on Monday should take their turns on the mound. Other pitchers follow general conditioning routine.

Wednesday

1. Preliminary running and exercises, with pitchers warming up the throwing arm.
2. Review fielding drill—covering first base, throwing to bases, fielding ground balls and bunts.
3. Pitchers who worked the Monday game should work a three-inning stint, or pitch the equivalent in batting practice. If the arm is stiff and sore, these men should not work, but rest the throwing arm.

Thursday

1. Same routine as Wednesday, with the Tuesday pitchers working three innings or batting practice equivalent.

Friday

1. Regular conditioning workout, eliminating throwing except for loosening the arm. If the arm is tired, or the pitchers feel some muscle soreness, no throwing should be done.

Saturday

1. Nine-inning game. Monday pitchers work six innings; Tuesday pitchers three innings. Any others work on conditioning and throwing batting practice.

FOURTH WEEK

Monday

1. After regular preliminary warmup, pitchers who worked six innings on Saturday should work three, those who worked three innings should work six in a regulation nine-inning game. Any others work as on Saturday.

Tuesday

1. Conditioning work, eliminating all throwing except five minutes warm-up for regular pitchers. Others work as above.

Wednesday

1. Further conditioning work, with pitching warm-up; emphasis on control.

Thursday

1. If a game is to be played on Saturday, fifteen minutes of pitching batting practice should follow the warm-up and exercises. No running is necessary; pitchers should shower immediately after pitching batting practice. Pitchers who will not be involved in the upcoming game should follow the regular conditioning routine.

Friday

1. Possible starting pitchers warm up with running and exercises, eliminating all throwing unless the arm feels particu-

larly good. In such cases, five minutes of control pitching may be permitted, throwing at not more than three-fourths speed. Follow immediately with shower.

Saturday (game day)

1. Report on field early to observe opponents batting practice, diagnosing various batter weaknesses along with the catcher and coach. No throwing or exercise, except taking regular turn in batting practice.
2. Warm-up for game, as described above. On the next regular practice day, pitchers who worked the game should follow the general conditioning routine, with at least fifteen minutes pitching batting practice, provided the arm is not tired or sore.

Mid-Season

After four weeks of preliminary work of the sort just described, both the coach and each individual pitcher should know what capabilities the pitcher has, and how much daily work he needs. From this point forward, the emphasis should be on improvement in skills and on maintenance of good condition.

As a general rule, when a pitcher is scheduled to work on Saturday in a regulation game, he should pitch either a practice game of five innings or the equivalent in batting practice on Wednesday; on Tuesday, if he is slated for Friday.

If there are mid-week games, pitchers working on Saturday should ordinarily be able to pitch a full game the following Wednesday. The only other pitching during the week should be for control. This is entirely dependent on the way the pitcher's arm feels, of course, and must be adjusted to the individual situation.

Late Season

During the latter part of the season, the average pitcher should be able to regulate his workouts to fit his own needs. Some will continue working a full routine; others can reduce the amount of work. The chief objective is to maintain the

conditioning edge, along with a steady improvement in skills. Some pitchers may tend to be lazy, but this again has to be a matter of individual judgment on the part of the coach.

On baseball squads which have only one or two pitchers, the routine outlined above can still be followed. Substitute infielders and outfielders will have to work as batting practice pitchers. If the squad is so small that there are not enough substitutes, each infielder and outfielder can pitch to three or four batters. This amount of throwing should not ordinarily affect the fielder's throwing arm, and will help them in becoming more accurate themselves. Generally speaking, the more throwing for accuracy, the better.

CHAPTER 4

THE CATCHER AND CATCHING

The catcher on a baseball team may be compared to the football team's quarterback. As a rule, he calls every pitch delivered from the mound. He calls many defensive plays, checks defensive positions, and is responsible for keeping the rest of his team alert and fully informed about the game situation. He is the only player who has an unobstructed view of the entire playing field; he is, in turn, the only player whom all other members of the team can always see. Their attention, therefore, tends to focus on him, and the temper of his actions can influence their thinking, alertness, and mental attitude. It has been said in a preceding chapter that the pitcher is the most important single player in determining the direction and outcome of the game; the catcher, certainly, is executive vice-president in charge of personnel and strategy.

Qualifications

Physically speaking, the catcher should have a good throwing arm that is quick and accurate. He must be able to handle all varieties of thrown, pitched, and bunted balls—which obviously calls for nimbleness afoot and a sure pair of hands. He must have considerable endurance, since an ordinary ball game requires more work from the catcher than any other player with the possible exception of the pitcher.

The best catchers have tended to be physically big and solidly built, but there have been sufficient exceptions to prove that any kind of physique will do if the player has the right attitude and can develop the proper skills.

In terms of his mental and emotional equipment, the catcher should be both smart and steady. He must be aggressive and alert enough that he makes it a point to study each batter,

without prompting, to learn his weaknesses. He must keep a constant and alert eye on the base runners and coaches of the opposition for possible tipoffs on potential play situations. He directs his team's defense, and, as if he didn't have enough other things to do, must protect his signals against theft.

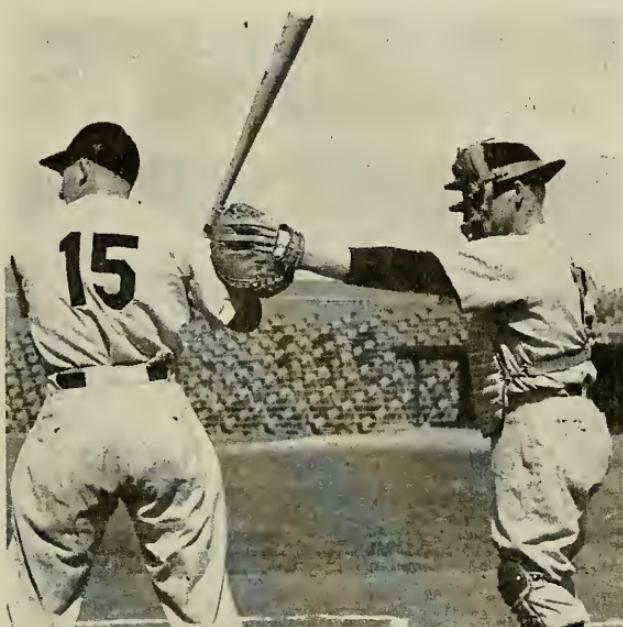


Fig. 49.—Catcher's distance from batter.

Although he should be both mentally and temperamentally aggressive, the catcher must also be able to keep the lid on his emotions—to remain calm under all conditions. There have been some factious hotheads in baseball, but few of them have been catchers. Hotheadedness can interfere with straight thinking and can also throw fellow players off balance. The ideal catcher, in terms of temperament, is a rare combination of aggressiveness and drive with a real capacity to remain relaxed.

Position

The catcher's position in his box should be as close to the batter as possible without running a risk of interference. A

good position is one from which the catcher can just touch the batter's shoulder with his outstretched gloved hand (Fig. 49). At this distance there is little danger of interference, since the batter's stride and swing will carry him forward. This close position also gives the umpire better visibility for his call, particularly on pitches that are around the knees, gives the pitcher a better target, and helps the catcher handle foul tips and low pitches more easily. It also maintains the shortest possible distances for the catcher's throws to various bases.



Fig. 50.—Catcher's position in giving signals.

GIVING SIGNALS

Giving signals is one of the catcher's arts, but its importance is sometimes underestimated. Basically, signals are the language of the baseball field, the essential form of communication. Through signals, the catcher and the pitcher carry on the running conversation which determines the pattern of the whole game, defensively speaking. The catcher is chiefly responsible. His signals must be clear enough and simple enough that they may be read easily; at the same time, they

must not be given in such a manner that an opposition player can pick them up.

There are many ways in which the catcher can give signals to his pitcher. They may be given with the right hand on the inside of the leg, well-hidden in the crotch. They also may be given with the glove, with the hands outside the crotch, or with the feet. Regardless of what signal system is used, the catcher always should take a squat position in his box, feet spread comfortably, knees apart. The left forearm should rest on the left thigh, with the glove extended beyond the knee (Fig. 50).

Here are some sample methods of giving signals:

Crotch Signals

1. The Single Series

Crotch signals are the most common in baseball generally, and the simplest of the crotch signal systems is the digit, or single, series. One finger is a fast ball; two fingers showing, a curve; three fingers showing, a change of pace; four fingers, a pitchout. (When both catcher and pitcher are experienced, a change of pace signal is not necessary, the pitcher delivering it at his discretion.)

2. The Multiple Series

The multiple digit series is somewhat more complicated, with a series of three signals involved. For example: The catcher gives three consecutive signals with his fingers. The second, or middle, one is disregarded. If the sum of the first and third signals is odd and less than six, a fast ball is indicated; if the sum is an even number and less than six, a curve ball; if the sum is a total of six, a change of pace; more than six, a pitchout. As a variation, the sum of the first two or last two signals may be used.

3. The Thumb Series

In the thumb series, the single series of digits is used. The thumb is the key to the signal. The back of the hand is toward the pitcher. If the thumb is turned in and hidden in the palm of the hand, the call is for a fast ball, regardless of the number

Fast



Curve



Change



Pitchout



Fig. 51.—The hand series: fast ball; curve; change of pace; pitchout.

of fingers shown; if the thumb shows, regardless of the number of fingers, a curve ball; if the thumb is shown and wiggled, a change of pace; and if the hand is closed into a fist with the thumb showing, a pitchout. Any finger action in this series is simply a blind.

4. The Hand Series

If the palm of the hand is placed in the crotch, with the back toward the pitcher, a fast ball is indicated; the palm placed against the right thigh, close to the crotch, means the curve ball; the palm of the hand placed against the crotch and the fingers wiggled means a change of pace; and the little finger side of the hand in the crotch, with the thumb side toward the pitcher, a pitchout (Fig. 51).

Signals for Night Baseball

Night baseball has become an important part of the game, for better or worse; not only professional teams, but many amateur and college teams now play under the lights. This directly affects the business of giving signals, since crotch signals are difficult to see by artificial illumination. Some series for night use are given below; these may also be used in day-time games, a switch signal being used along with the regular signal.

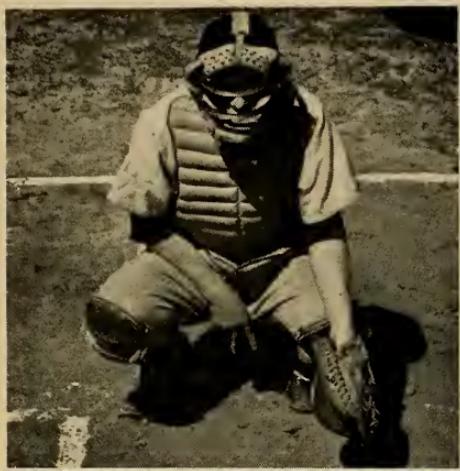
1. The Glove Series

The forearm rests on the left thigh, with the glove extended over the knee as false signals are given in the crotch. The wrist of the gloved hand hangs loosely over the knee. When the thumb side of the catcher's mitt is pointed squarely at the pitcher, a fast ball is indicated; when the palm side of the mitt shows, a curve ball; when the mitt in any position is wiggled slightly, a change of pace; and when the thumb of the mitt is up, a pitchout (Fig. 52).

2. The Knee Series

Again false signals should be first given in the crotch. The palm of the right hand is then placed over the front of the right knee to indicate the fast ball; for the curve ball, the palm

Fast



Curve



Change

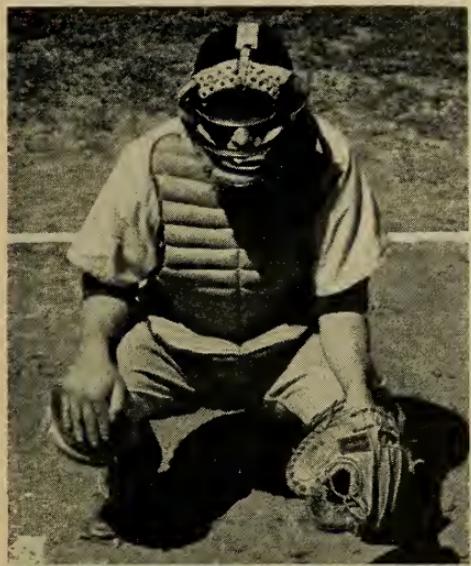


Pitchout



Fig. 52.—The glove series: fast ball; curve; change of pace; pitchout.

Fast



Curve



Change



Pitchout



Fig. 53.—The knee series: fast ball; curve; change of pace; pitchout.

Fast



Curve



Change

Fig. 54.—The foot series: fast ball; curve; change of pace; pitchout.

Pitchout

of the right hand is placed just inside the right knee; a finger wiggled slightly for the change of pace; the hand is placed just outside of the right knee for the pitchout (Fig. 53).

3. The Foot Series

False signals again should be given with the fingers. When the toes of both of the catcher's feet point directly at the pitcher, the fast ball is indicated; when the right foot is turned slightly outward, the curve; when the left foot is turned outward, the change of pace; and when both toes are turned outward, the pitchout (Fig. 54).

4. Head Series

Again the false signals are given with the fingers. Looking directly at the pitcher as the false signals are given indicates the fast ball; looking down at the ground indicates the curve ball; turning the head to the right indicates the change of pace; turning the head to the left indicates the pitchout.

Switching Signals

An important part of signal giving is the switch, in which a signal is given that alters the meaning of the signs in the series. This simple device is basic in preventing the opposing team's picking up the signal pattern. The switch is such an easy and obvious thing that the occasional quarrels over signal stealing in professional baseball which are reported in the newspapers have a rather hollow sound, since switches may be used in any series and may be altered at any time.

The switch signal may be given either before or after the regular signal, as long as it is understood by the players involved. When it is given, the fast ball may become the curve and vice versa; the change of pace, the pitchout and vice versa. The coach or battery men may work out their own variations, of course.

Here are some examples of switch signals which the catcher may use:

Sliding the hand toward the crotch on the inside of right thigh.

Picking up a handful of dirt.

Rubbing the hand on the chest protector.

Placing the hand over the front side of the glove, or wiggling the gloved hand.

Turning the head right or left at the time the regular signal is given.

Finally, two incidental notes on signals:

1. It will be observed that the various systems outlined above provide only for the fast ball, curve, change of pace, and pitchout. So far as most hurlers are concerned, the curve signal can be used for any breaking pitch, with the option (between the curve and the slider, for example) left to the pitcher. If, however, the pitcher throws two breaking pitches that are sharply different, a signal should be worked out for each. This is not very frequent in college or other non-professional baseball, although it is occasionally true in the majors.

2. It should be remembered that any signal given by the catcher to any other player than the pitcher must be answered; for example, the catcher's signal to the shortstop for a pick-off play at second base should be answered to confirm the fact that the play is "on." Responding to the signal, as well as giving it, should always be included in the drills for such plays.

The Catcher's Position After Giving Signals

The position into which the catcher moves after giving the signal depends largely on the pitcher. If the man on the mound is a control or curve ball pitcher, most of his pitches will be low; the catcher should therefore assume a low, squat position preliminary to catching all types of pitches. On curve balls, he should make a point of reaching forward for the ball; by doing so, he can often catch the ball in the strike zone, when taking it close to his body might permit the break to carry it outside and low.

If the pitcher depends on a fast ball his pitches will often be high; in this case, obviously, the catcher should assume a



Fig. 55.—The bare hand in catching the ball.

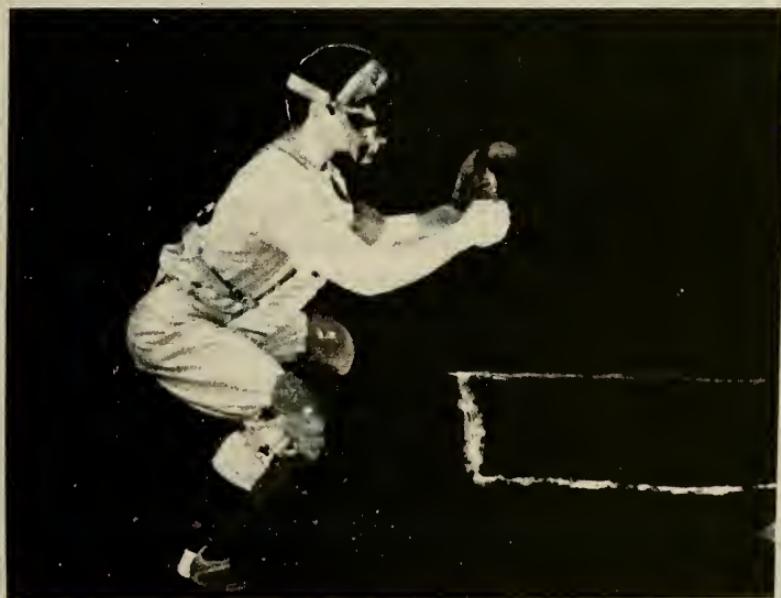


Fig. 56.—Another method of holding the hand.

more upright position. A pitcher with good control will often pick a target on the catcher's body—for example, the knee, the waist, or the shoulder. The catcher then needs to take a fairly upright position, being particularly careful to remain stationary during the pitcher's windup.

Regardless of any specific position, the catcher's stance should be such that the body and legs are relaxed and the feet spread at least the width of home plate. The feet should be so placed that the toe of the right foot is at least even with the heel of the left or farther back, whichever is comfortable, so that the shift to catch the ball can be more easily executed (see the Catcher's Shift, below). The catcher should keep his hands and arms relaxed and extended forward. He may keep the bare hand against the back of the glove and then roll it over the ball after it strikes the glove (Fig. 55). This helps eliminate the possibility of injury to the hand or fingers from foul tips. Another method catchers often use is to keep the fingers loosely closed around the thumb (Fig. 56). The fist should not be clenched, and the hand should be relaxed. As the ball strikes the glove, the bare hand is placed over it.

In order not to tip off the opposition to the type of pitch coming up, the catcher should hold the hand and glove in the same position for all types of pitches and not change them until the pitch has started. Once the pitch is on the way, the fingers are ordinarily pointed downward in catching a low pitch and pointed upward in catching a high one. The palms are turned toward the pitcher. The catcher can avoid injury of the fingers or hand by catching the ball with only the gloved hand when the bases are unoccupied and the call is less than two strikes on the batter.

BASIC DEFENSIVE PLAY

The Dropped Third Strike

When first base is unoccupied and the catcher drops a third strike, he should always try to tag the batter after retrieving the ball, throwing to first only when there is no chance of a

tag. This is also true with first base occupied and two out. With less than two out and first occupied, the batter-runner is automatically out.

A Batted Ball With No One On Base

When any ground ball is hit and fielded in the infield, the catcher should back up the throw to first base. If the throw comes from the right field side of the diamond, he backs up directly behind the throw; if from the left field side, the catcher should not go all the way. The right fielder will move in to back up the throw, and the only play the catcher would back up would be a bad throw that might carom off the first baseman's glove toward home plate.

On a base hit through the first baseman to the outfield, the catcher should, from time to time, trail the batter-runner to first base. When he does so, the first baseman should not swing back to cover the bag after the ball has passed him, but remain out in the diamond. The runner, seeing the first baseman in front of him, will often make a long turn toward second. The throw from right field goes to second base, with the shortstop usually covering and immediately relaying the ball to the catcher who has meantime moved up to cover first. To aid in this simple deception, the catcher should not run directly down the first base line, but swing wide in foul territory and come into the bag behind the first base coach. The coach will often watch the runner and ball and fail to warn the runner of the catcher's approach to the base.

With a Runner on First Base

When a ground ball is hit to the infield, the catcher should hold his position until he is sure the force-out is made at second base. He then backs up first base. If the ball is bunted along the third base line and the third baseman handles it, the catcher should start toward third base to cover if another player does not do so. This will prevent the runner from advancing from first to third on the bunt. If the catcher continues on to cover the base, he should call to the third baseman or pitcher to cover home plate.

With a Runner on Second Base

When the score is close and a sharp hit to the outfield is fielded cleanly, the throw-in should be to home plate. Since many throws are not accurate, the catcher must make every effort first to catch the ball and then tag the runner the best way possible. His body should be low as he makes the tag, and he should always tag low.

Ordinarily, it is not wise for the catcher to attempt deliberately to block the runner to make the tag, since there is not only a greater risk of losing the ball, but also of injury. When he is pulled directly on the base line in making the catch, however, the catcher has no alternative. In that case he should drop to one or both knees and brace himself for the impact. He should always tag the runner with the ball in both hands, never in one except when it is the only possibility.

It should be remembered, however, that the catcher's first job is to give the fielder making the throw a good target, at the same time placing himself in position to tag the runner easily if the throw is accurate.

Taking Throws

The catcher can set a target as follows:

On a ball thrown in from the right field side of the diamond, he should place his right foot three or four inches from the third base line in foul territory and close to the plate, with his left foot spread comfortably. Both feet should be parallel to the third base line and on the third base side of home plate. He should face toward the throw (Fig. 57). This places the plate in front of the catcher and leaves it in full view of the base runner. Under these conditions the base runner will normally slide to the infield side of the diamond. As the catcher makes the catch, he should drop to either or both knees, thus covering the base line and making an easy tag as the runner slides for the plate. The slide will be made into the glove, thus eliminating the possibility of the catcher's bare hand being cut by the runner's spikes (Fig. 58).

If the throw comes from the left field side, the catcher should place his left foot inside the third base line, off the left field corner of the front edge of the plate. Again the right foot should be comfortably spread, with the feet parallel to the first base line, facing the throw (Fig. 59). The base runner will normally slide to the foul territory side of the plate, since the plate is open on that side. As the catcher makes the catch, he drops to either or both knees, keeping his bare hand well covered in the glove to protect it and tags the runner (Fig. 60).

In making any catch, the catcher should not reach for the ball too quickly. If he keeps his arms at his side until the last possible moment, he can often fool the runner into slowing up slightly because he assumes there is no play. On a close play, this device can be the difference between a run and an out.

On all throws that come to him wide of the plate, the catcher leaves his position and catches or blocks the ball so that no other base runner can advance. If however, he still has a play after securing the ball, he should dive for the third base side of the plate. When he reaches forward, he thus covers that side. When the throw is late and he has no play at home, he should call to the cutoff man to take the throw. At the same time he should step into the diamond and out of the runner's way, in position to back up the throw. If the cutoff man has a play, the catcher should help him by calling it.

With a Runner on Third Base

The catcher should take the same positions for a tag when third base is occupied and a fly ball is hit to the outfield, if there is a possibility of a play on the runner advancing after the ball is caught. The same procedure should also be used when third base is occupied and the runner attempts to score on a ground ball hit to the infield.

If the runner stops on the throw to the plate and does not attempt to score, the catcher should immediately run toward him as fast as possible, making a fake throw or two to force the runner back toward third base. Only when there is an

Taking Throws



Fig. 57.—From the right field side of the diamond.



Fig. 58.—The tag.

Taking Throws

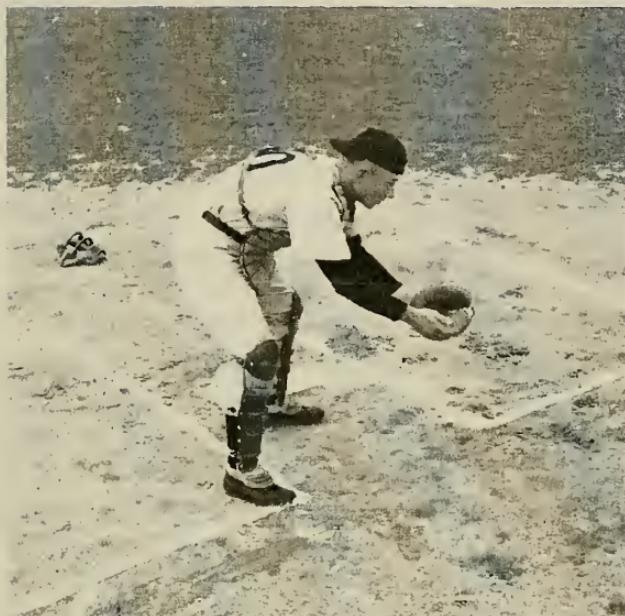


Fig. 59.—From the left field side of the diamond.



Fig. 60.—The tag.

actual play, with the runner committed to returning to third, does the catcher throw to the fielder covering the base. Every effort should be made to put out the runner on the first exchange of throws, and never should there be more than two exchanges. The "rundown" with four or five relays may be exciting stuff for broadcasters and some spectators, but it is not very good baseball.

Making Throws

With Runners on First and Second Bases

When the first two bases are occupied and the score close, all members of the infield should be alert to the possibility of a double steal. This is particularly true of the catcher, since he is responsible for the appropriate throw. The throw for the double steal should usually go to third base. The shortstop and second baseman, however, should be aware of a possible throw to second and should cover, since the runner on first base cannot start until the runner on second has started. Consequently the runner on first gets a later start, and a throw to second will often result in a put-out. Fundamentally, this becomes a matter of the catcher's judgment of the speed of the runner going to second. He should always remember that a put-out at second is better than a close miss at third.

With Runners on First and Third Bases

This is the classic double steal situation when the score is close or the offense is runs ahead. The catcher has one of three choices:

1. He may throw to second base, for the runner going from first to second. (He should always do so if his team is two or more runs ahead in the last inning, to prevent the runner from first base getting into scoring position.) If there is no more than one run difference or the score is tied, the catcher must make a spot decision. A fast runner on third base will probably attempt to score on a throw to second; in this case the catcher should fake the runner back to third by taking a glance at him as he shifts and then throw through to second. If on the pitch the runner on first base starts for second and

stops, the catcher should ordinarily try to fake the runner back to third base, then throw through to second. He must be careful not to leave the plate uncovered by running at the runner who has stopped, since the runner on third could easily score.

2. He may bluff his throw to second base, then wheel and throw to third. On the bluff throw, it is important that the catcher go through his throwing actions precisely the same as throwing to second base, except that he holds on to the ball. The momentum of the throwing action will carry him forward, so that he can then step in front of the batter with his right foot, pivot on his right foot, step out with the left and throw to third. The third baseman should always anticipate the possible bluff throw and cover third base in this situation. This is a rather difficult play for inexperienced catchers to make, but one who throws well can use it more effectively than one with a poor throwing arm.

3. By prearranged signal, such as rubbing the chest protector, the catcher may throw for a cutoff by the pitcher, who in turn plays the runner on third base. The catcher's throw must have sufficient speed that the base runner on third will assume it is going through to second base. The throw should be head high, and all the body actions of the catcher should be the same as on the through throw.

The Force-Out at Home Plate

When a ball is hit to the infield and all three bases are occupied the catcher should set himself for the force-out at home plate. He should place his left foot on the front of the plate, the right foot parallel and off the plate, facing squarely toward the player making the throw. On an accurate throw from the right field side of the diamond, the catcher steps forward with the right foot as he makes the catch, then steps out with the left foot to make his throw to first base (Fig. 61). This step carries him away from the runner coming from third and diminishes the possibility of a collision between the runner and the catcher's throwing arm.

On a throw to his left (but from the right field side of the diamond) the catcher steps to his left with his left foot, places

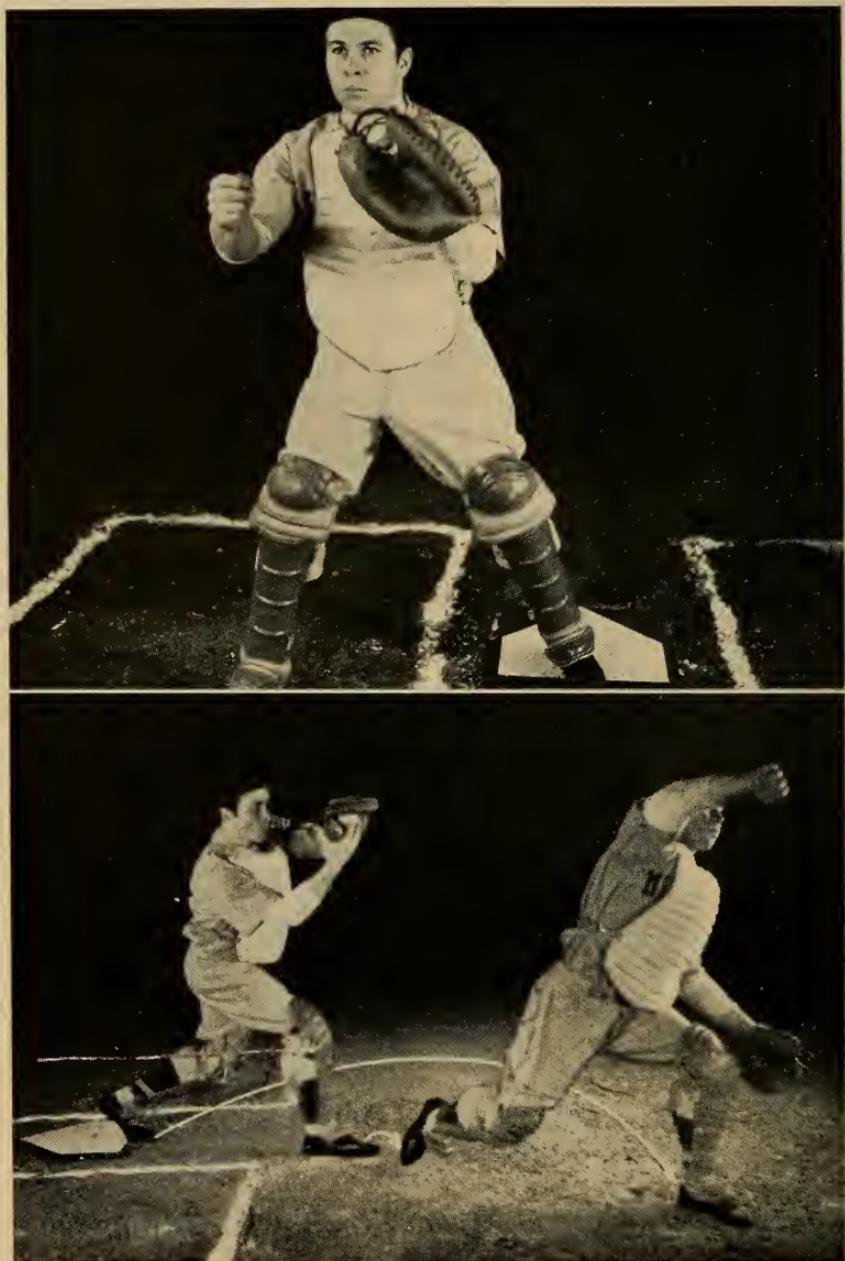


Fig. 61.—For the force-out and completing double.

his right foot on the plate and then steps diagonally forward and left with the left foot to make the catch. He then steps toward first base with the right foot, bringing his left foot up normally as he makes the throw. If the throw is too wide for this shift, the catcher must leave the plate, make his catch and tag the runner or dive for the third base side of the plate if he still has a chance to make a tag.

If he cannot make either of these plays, he should immediately throw to first base for the batter-runner going down the line, if there is still time for the play.

If the throw comes from the left field side of the diamond the catcher again faces the throw. His left foot should be on the front edge of the plate, his right foot toward first base. As he receives the throw he pivots on his right foot, steps toward first with the left and throws. If the throw is wide to his left, he should place his right foot on home plate, and step out with his left foot into foul territory to make the catch. As he makes the catch, he should pivot to his right on his left foot, swinging the other foot back normally, and then step forward with his left for the throw. This places him out of the path of the base runner, and he makes his throw from foul territory. If the throw is too wide for this shift, the catcher again will have to decide whether to play the plate or throw to first, as described above.

The Catcher's Shift

It is very important for the catcher to get as squarely in front of the pitch as possible in catching the ball. He knows where the pitcher will attempt to pitch since he has called it. Consequently, assuming the pitcher has reasonable control, the catcher should be in readiness with his weight so controlled that he can catch practically any pitch in such a way that he is in position to make any play that may arise.

For Throws to First Base

With a right-handed batter at bat, the catcher steps left, if the pitch is to his left. After the catch, he should shift his

weight to the right foot, then step out with his left foot in the direction of the throw.

On a pitch over the plate, the catcher catches the ball and merely steps forward with the left foot for his throw to first base. If the pitch is inside to a left-handed batter, the catcher may step behind the batter for his throw (Fig. 62). If he is unable to do this, he should step right with the right foot, make the catch, then shift his weight to his left foot, step forward with his right, then forward with his left toward first for the throw.

Shifting for Throws

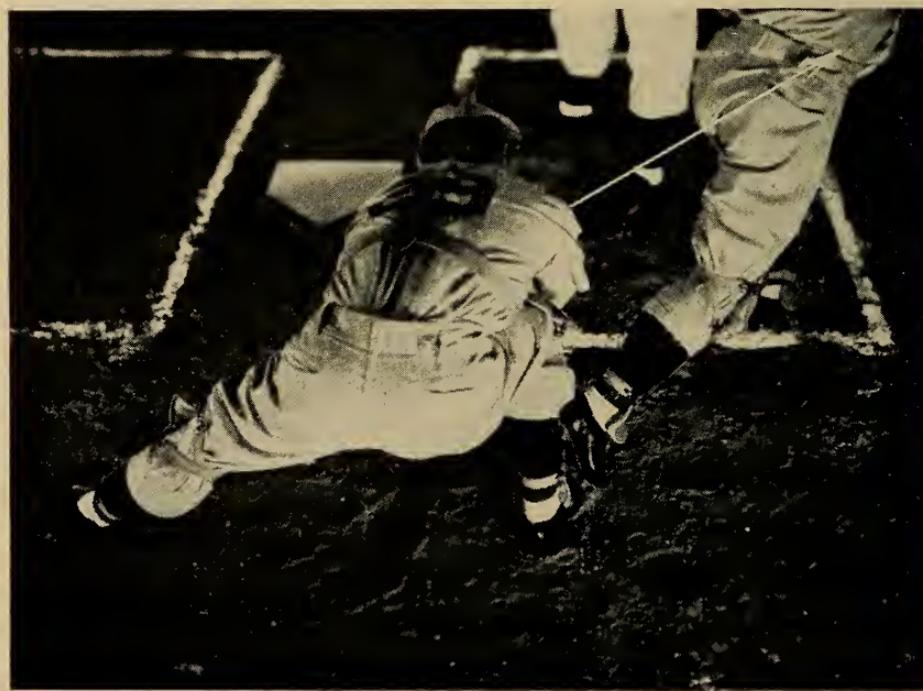


Fig. 62.—To first base (stepping behind a left-handed batter).

If the pitch is away from the left-handed batter, the catcher should, of course, step to the left with his left foot, to take the ball. His next step is forward with his right foot. He then steps toward first base with his left foot; this movement carries him in front of the batter as he makes the throw. Tall catchers

may be able to throw over the batter on throws to first base, stepping in their natural way. As the shifts are speeded up they become practically jump shifts.

For Throws to Second Base

If a right-handed batter is at bat and the pitch is to the right, the catcher steps right and slightly forward with his right foot, catches the ball, then steps forward with his left foot for the throw to second base (Fig. 63). If a left-handed batter is at bat, and the pitch is to the catcher's right, the catcher again steps to the right with his right foot, catches the ball, then shifts all his weight back to his left foot. He then steps diagonally forward and toward home plate with his right foot, then forward with his left as he makes the throw. This shift clears the batter (Fig. 64). As this movement is speeded up, it develops into a jump shift.

If a right-handed batter is at bat and the pitch is to the left of the catcher, he should step to the left with his left foot, catch the ball, then step straight forward with his right foot, shifting his weight to the right foot. He then steps forward with the left foot for the throw. He should try to step on a hypothetical line crossing home plate.

If a left-handed batter is at bat, and the pitch is to the left of the catcher, the catcher steps to the left and, if possible, slightly forward with the left foot. The right foot is then swung behind the left or a step is taken in front of the left foot, the weight shifting to the right, the left foot striding out for the throw. This shift clears the batter (Fig. 65). As the shift is increased in speed, it becomes a jump shift.

For Throws to Third Base

With a right-handed batter at bat, the catcher takes his normal position behind the batter. On a pitch to his left, the catcher takes his initial step to the left, then swings his right foot diagonally backward behind his left foot. He then steps toward third base with his left foot for the throw, thus clearing the batter (Fig. 66). With a right-hander at the plate, if the pitch is away but not too wide, the catcher steps to the right

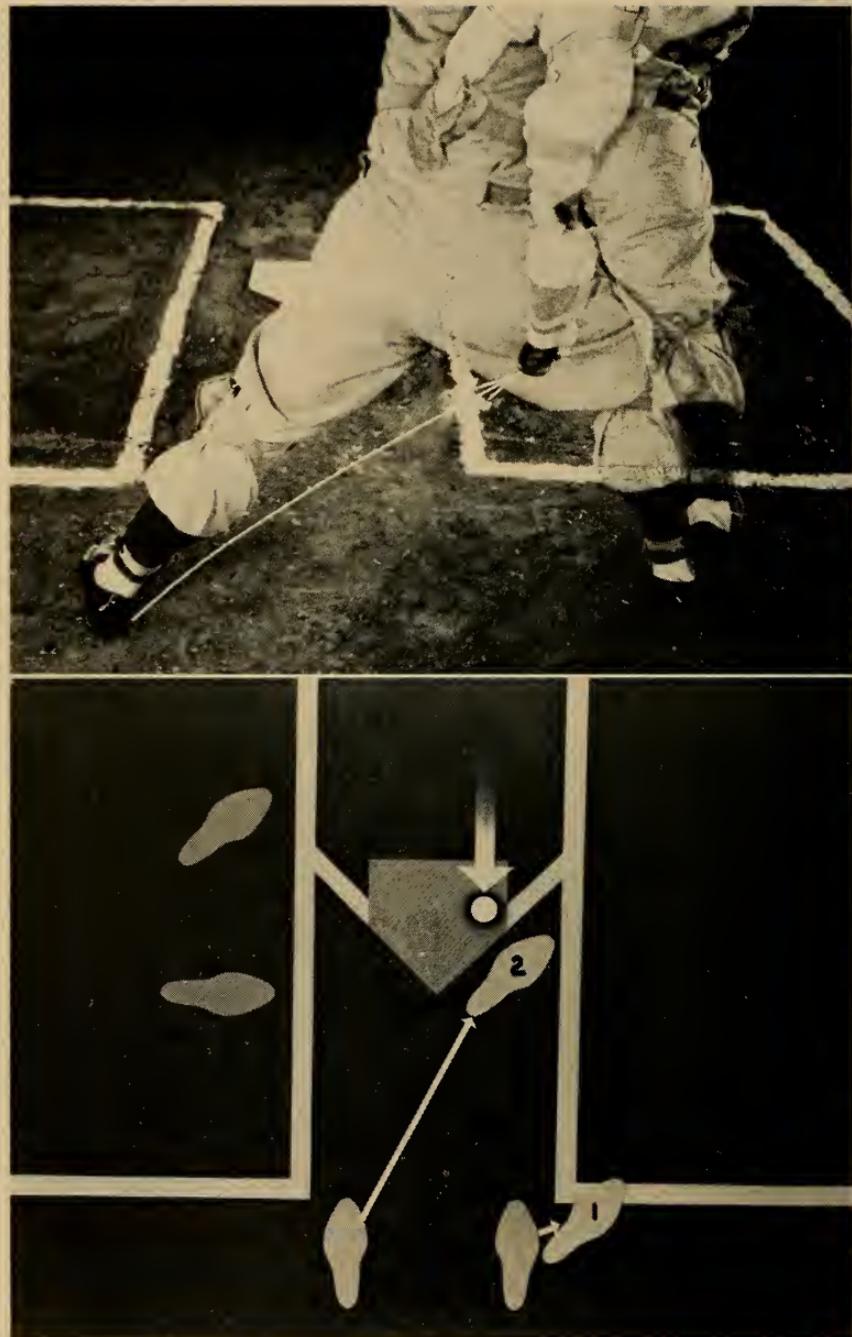


Fig. 63.—To second base (outside pitch to right-handed batter).

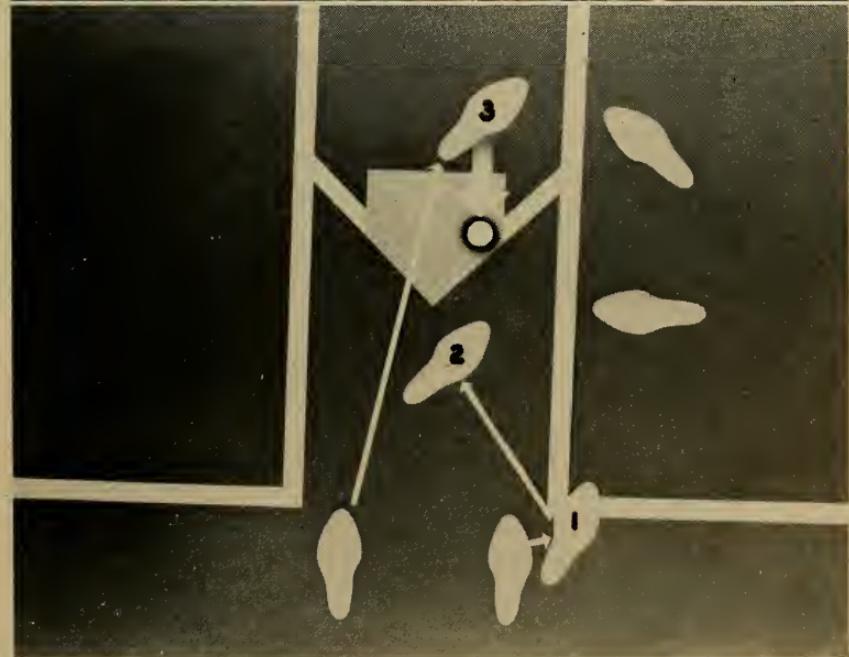


Fig. 64.—To second base (inside pitch to left-handed batter).

for the catch then shifts his weight back to the left foot. He then should step diagonally in back of the left foot, shifting his weight to the right foot, and step out with his left foot for the throw.

This throw may also be made in front of the batter if the catcher steps diagonally forward with the right foot as he makes the catch. The batter's position in the box, of course, may affect this.



Fig. 65.—To second base (outside pitch to left-handed hitter).

After the catcher has developed the shift, he will automatically swing into the proper position and, as he catches the ball, step in front of or in back of the batter. Tall catchers will often be able to throw over the batter by catching the ball and then merely stepping toward third base as they make the throw, thus eliminating a step in their shift.

With a left-handed batter, the catcher makes his initial step right or left to catch the ball. After the catch, he takes his normal stride to make the throw to third.

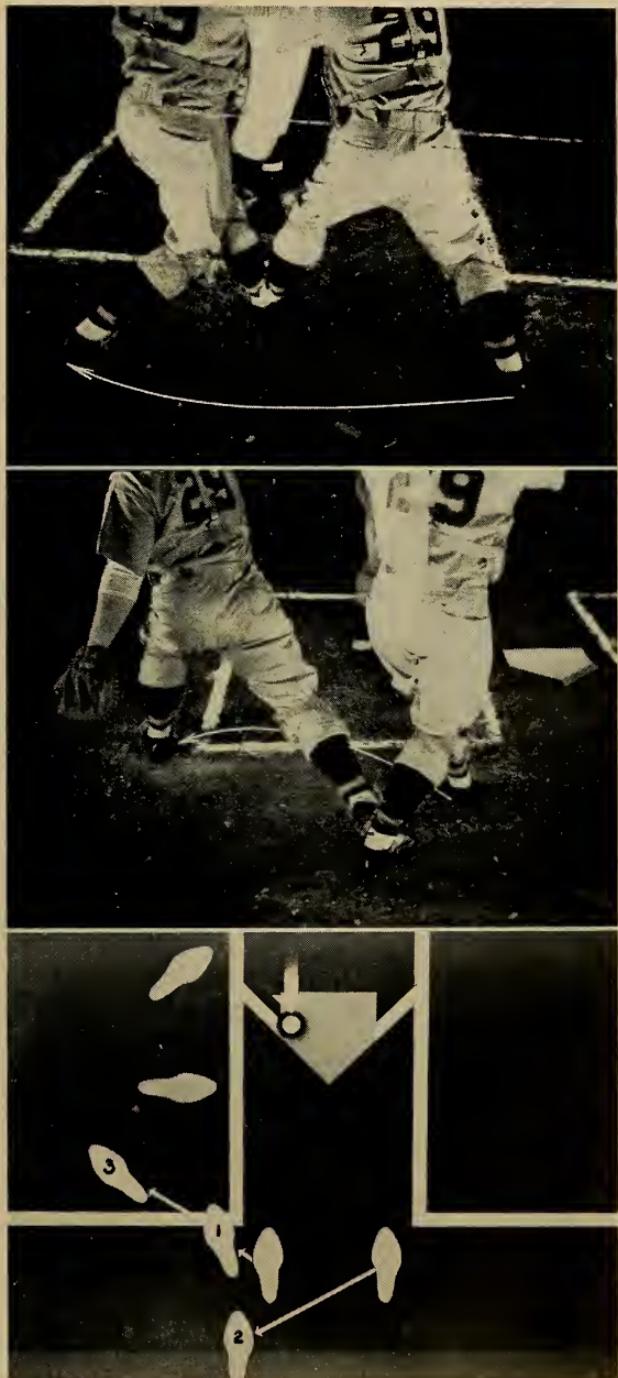


Fig. 66.—To third base.

METHODS OF THROWING

The best throw for a catcher in most cases is the snap overhand. This throw has good carry and gets the ball away a trifle faster than the full arm overhand.

The catcher should, however, be able to execute all types of throws since there are occasions when each will have to be used. For example, a ball bunted or hit in the home plate area may mean a hurried throw to first or third base, and the catcher may use a sidearm or underhand snap throw without raising the body. Because of the distance, the throw to second base should always be overhand. When a man is caught between third and home plate and the throw is made to third, the sidearm throw may be used to prevent hitting the runner. However, when there is time and no danger of hitting a runner, the overhand throw should be used. A catcher who gets rid of the ball quickly and accurately is better, generally speaking, than one who throws hard but gets rid of the ball slowly.

With the score close or the opposing team runs ahead and any base occupied, the catcher should always shift into position ready to throw each time he catches the ball. The runner may take too long a lead and a play can be made on him. When the opposition is runs behind they will play safe, and normally not take a lead long enough for a possible play. If a runner breaks, the closest infielder should help the catcher by calling, "There he goes."

The throw made for a tag of a base runner should be knee high and toward the side of the base to which the runner is coming; the throw made for a force-out should be chest high.

When returning the ball to the pitcher, the catcher should throw the ball back with a snap, and chest high. This helps avoid the possibility of a delayed steal, and also keeps the pitcher on his toes.

CATCHING FLY BALLS

The catcher should remember that a foul fly ball will always curve toward the infield because of the rotation of the ball,

provided there is no wind blowing. As soon as a ball is hit into the air and the catcher sees he has a chance to handle it, he should remove his mask, toss it in the opposite direction to which he is moving and get under the ball as fast as possible. If the ball comes down in the infield, the catcher should play the ball directly above his head. This will give him an opportunity to play the curve with his arms as the ball curves away from him (Fig. 67).

If the catcher's back is to the infield in catching a foul fly ball, he should play the ball arm's length in front of him, since the ball will curve back toward him. The higher the fly, the greater the curve.

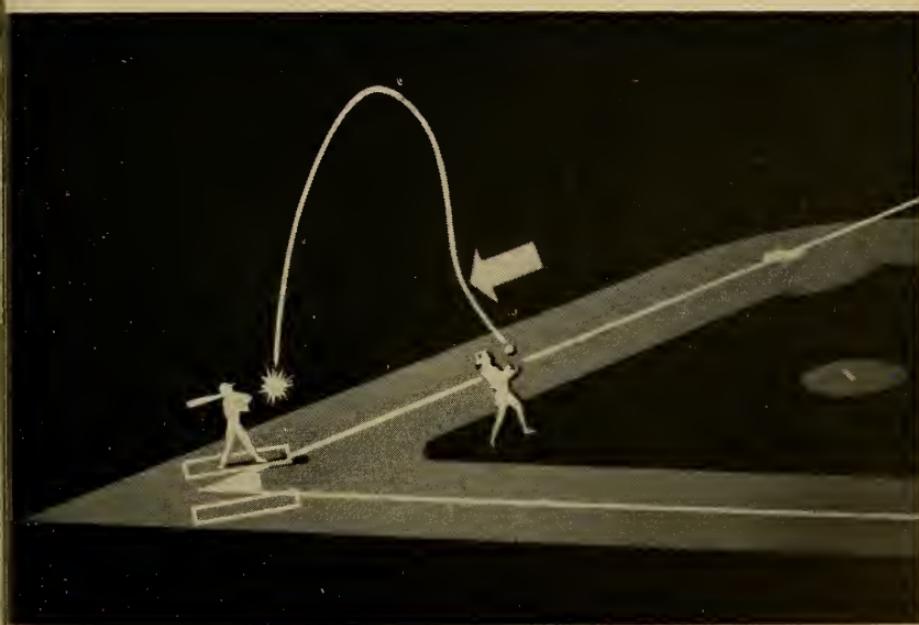


Fig. 67.—Playing the curve of a fly ball.

If the fly ball is hit along the third base line, the ball should be played off the left shoulder; and if it is hit along the first base line, it should be played off the right shoulder. In each case, the ball tends to rotate toward the infield.

If a strong wind is blowing from the outfield, the wind will eliminate the curve, but if a strong wind is blowing toward the

outfield the curve will be greater, and the ball must be played accordingly. If a cross-wind is blowing from the third base side of the diamond, fly balls hit along this line have a greater curve as they come down; the curve is lessened when a cross-wind is blowing from the first base side of the diamond, obviously. Whenever possible the catcher should try to face the infield on foul fly balls, so that he can move with the curve.

In catching fly balls, the inexperienced catcher has a tendency to stiffen his legs and body. Provided there is not much of a run, he should try to be relaxed and flex the knees slightly while going after the ball. This will help eliminate swaying with the ball. As a high fly ball is coming down, a catcher can often keep from swaying and help eliminate misjudging its course by taking a quick glance away from it. As he looks back, he can more easily judge the arc of the descent.

Whenever a ball is hit out in front of the catcher so that an infilder can catch it, the catcher should call for him to take it. Since the infilder is coming into the ball, he can judge it better. If, however, the infilder must look into the sun to make the catch, the catcher should make the play if possible.

When third base is occupied and a fly ball is hit behind the catcher or to either side in foul territory, he should call to the pitcher, third baseman, or first baseman to cover home plate; otherwise, the runner on third base may tag up and score after the ball is caught.

Catching fly balls should be a part of the daily routine of each catcher.

BUNTS

Bunt situations usually arise when a team is playing for one or two runs and there are no outs.

A team several runs behind will seldom bunt, but with the score tied or with the team a few runs ahead, it may turn to bunting to get the runner or runners into scoring position.

A team will not sacrifice bunt with two outs, and seldom with one out.

A team will very seldom bunt with two strikes called, because if the ball is fouled, the batter is automatically out.

A team playing percentage will often turn toward hitting, if the batter is a good hitter, even in a normal bunt situation.

Fielding Bunts

When a ball is bunted or slowly hit in his area, the catcher should start for it immediately (Fig. 68). If the ball is bunted to either side in the direction of the pitcher's mound, the catcher fields the ball off his right side, placing the gloved hand in front of the ball and scooping it into the glove (Fig. 69). If the ball is rolling, he places the right foot as close to the rolling ball as possible, so that there will be plenty of room to handle it. On a fast play, when the ball has stopped, the catcher may have to pick it up with the throwing hand. Both hands should be used, however, whenever possible (Fig. 70). Again the right foot is placed close to the ball. A bunted ball in the catcher's area should be fielded this way regardless of the base to which it is to be thrown.

On a ball bunted or tapped down the third base line, if the throw is to go to first base, the catcher may field it with his body to the right of the ball, his back toward first base. On a rolling ball, he should place the left foot as close to the ball as possible, so that he has plenty of space to field it as it rolls to his right. If the ball has stopped rolling, he places his right foot close to the ball and makes a turn to his left on his right foot, then steps out with his left foot as he throws to first base. This method of fielding a ball down the third base line helps the catcher maintain his balance. If a short fly ball is bunted along the third base line and the catcher cannot catch it, he should place himself to its left. The rotation of the ball will cause it to roll toward the third base line as it hits the ground. A ball bunted on the fly along the first base line will roll toward the line after it hits the ground and should be played to its right.

Bunted balls along either base line should be permitted to roll, whenever the batter-runner cannot be thrown out at first base. If the ball rolls foul it should immediately be touched.

It may roll fair. If another base is occupied, the catcher must be alert that the base runner does not advance an extra base if the ball does not roll foul.

The ball should always be fielded as quickly as possible if rolling in foul territory. If it rolls fair the runner would then be safe before the play to first base could be made. Whenever the bunt can be more easily handled by the third baseman, pitcher, or first baseman, the catcher should call the play telling them what to do. These players face home plate as they field the ball and cannot see the possible plays.

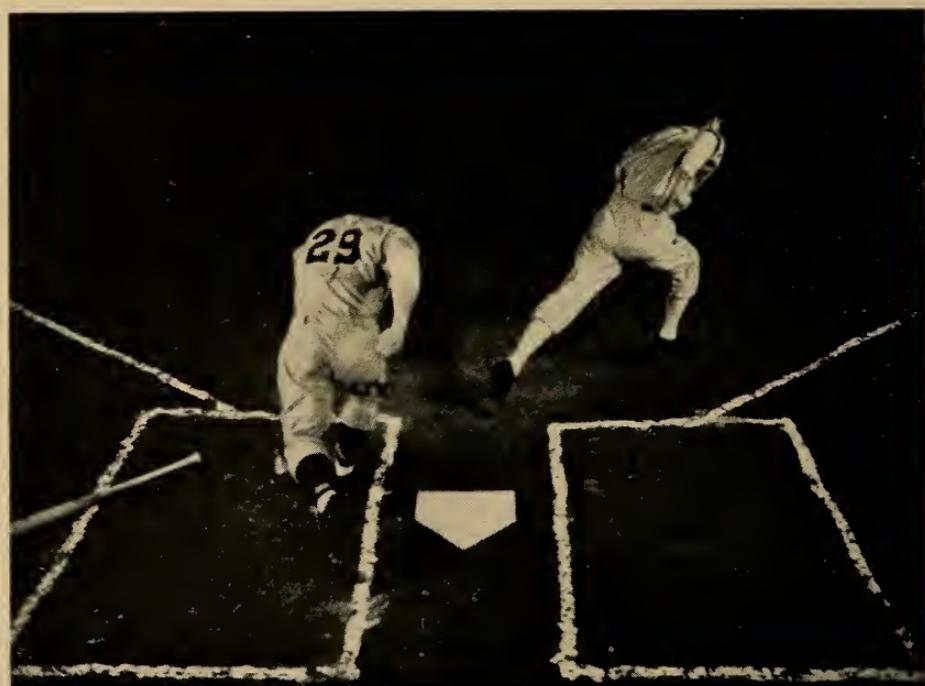


Fig. 68.—Starting for a bunt.

POINTS TO REMEMBER

The catcher should frequently check the defensive positions of the infielders and outfielders. If a player is out of fielding position, the catcher should wave him to his proper position.

The catcher should watch the batters for their weaknesses and catalogue them in his mind.



Fig. 69.—Fielding a ball bunted toward the pitcher.



Fig. 70.—Fielding a bunted ball that has stopped rolling.

During the game the catcher should remember each pitch that was hit solidly by a batter in his previous time at bat, as well as pitches he found difficult. The catcher ordinarily should not call a pitch that the batter hit well before.

He should be alert for any possible steal or hit-and-run play, and call for a pitchout if the pitcher has good control and he himself has a good chance to throw out the runner. He should not call pitchouts if the pitcher's control is poor. If a pitchout does not have a bearing on the final result of the game, or if the catcher's team is three or four runs ahead, a pitchout should not be called.

When a batter takes his position at bat and bases are occupied, the catcher should watch the batter closely, since his actions will sometimes tip off the intended play.

Ordinarily, the catcher should call the pitch to combat a sacrifice bunt through the strike zone, high and inside, since this type of pitch is often popped up. A change of pace should never be called when the bunt is expected.

When the catcher is convinced the hit-and-run is "on," he should call for an inside high pitch to a right-handed batter unless the batter stands well away from the plate. In this case the pitch should be outside and away from the batter. If the batter is a left-handed pull hitter, the pitchout should be high and outside. Again a change of pace ball should not be called.

If the catcher watches a base runner closely, he also may get useful information. If the runner is planning to steal a base, he may take a step or two longer lead, or he may lean toward the next base just before the pitcher delivers the ball. A glance at the runner will prepare the catcher for the steal. By observing the coaches, he can sometimes learn from them the signal for the intended play.

TRAINING

Early Season

When the battery men report, the catcher's first job is to learn all he can about the pitchers with whom he will work.

He should discuss batter weaknesses with them, find out the type of pitches which each likes to throw, work with new prospects and give them encouragement. This is part of the process of establishing friendly relations and mutual confidence between the battery men.

The catcher's own physical work should emphasize proper shifting and catching of every pitched ball. He should also practice accuracy in his return throw to the pitcher, picking a target, usually the pitcher's chest, and aiming for control.

As soon as the other players on the squad report, the catcher should take, along with the regular physical workout of the other squad members, a daily stint catching batting practice. Twenty minutes daily is about the proper time. In these work-outs, the bare hand should be held behind the body, and the ball caught with the gloved hand only. This not only eliminates the chance of injury to the throwing hand, but also teaches the proper use of the glove in catching a pitched ball.

Mid-season and Late-season

After the season has started, the catcher should catch at least two rounds of infield practice daily to keep his throwing sharp. If he catches only one or two games a week, he should also have at least two days behind the plate in batting practice.

After a few weeks, the catcher and coach should know just how much work is needed to keep him in proper condition. The important thing is to be at peak efficiency for any and all games.

CHAPTER 5

THE BATTERY

The pitcher and catcher of a baseball team are called the battery. Together these two players are the backbone of good defensive play. To the casual spectator, the pitcher is more important and spectacular; but there is no consistently great pitching without good catching, and good baseball games are seldom played without good battery work.

An experienced catcher can make an inexperienced pitcher look good by calling the proper pitches, and by providing good advice and encouragement. If the pitcher is excitable or working under heavy pressure, the catcher can do much to help him keep the proper mental set and attitude for effective play. If the pitcher's control is consistently high, low, or to either side of the plate, the catcher can set himself in such a way so as to provide a better target. It is equally true that an inexperienced catcher can cause a good pitcher to pitch a poor game by calling the wrong pitches and not providing a good target or a good atmosphere of cooperation. Both members of the battery must have confidence in each other's ability and judgment, and both must work together with precision if they are to be successful.

The basic objective of the battery, of course, is to keep the batter from hitting the ball well, or at least from getting on base. The basic study of any pitcher-catcher combination, then, is batter weakness. Much time is spent in professional baseball in studying batters, and most major league battery men know the weaknesses of most of the two hundred-odd players they may face during a regular season. The average nonprofessional team cannot be so thorough, obviously; nevertheless, there are some general principles and practices which are very helpful in most situations.

BATTER WEAKNESSES

There is an old story in baseball about a major league pitcher who kept a notebook on hitters; the only weakness which he had noted down for the great Honus Wagner was "a base on balls." Generally speaking, however, every batter has a weakness—at least one pitch that he has difficulty hitting. These general weaknesses might be broken down as follows:

Weaknesses Common to All Batters

In pitching to a batter's weakness, the pitcher endeavors to deliver the ball through the strike zone—the area from the top of the knees and below the armpits, over the plate. The weakness is that pitch—high, low, inside or outside—that the batter does not hit well. A right-handed pitcher pitching to a right-handed batter will usually find him weak on one of the following pitches—a high fast ball inside, a low fast ball outside, or a curve ball low and outside. A right-handed pitcher pitching to a left-handed batter will usually find him weak on a fast ball low and outside, a fast ball high and outside, or a curve ball low and inside.

When a left-handed pitcher is pitching to a right-handed batter he will usually find him weak on a fast ball low and outside, a curve ball inside, between the knees and waist, or a fast ball high and outside. When a left-handed pitcher is pitching to a left-handed batter, he will usually find him weak on a curve ball low and outside, a fast ball high and inside, or a fast ball low and outside. There are always exceptions, of course, and sometimes it is the exceptions that break up a ball game, but both long-time observation of actual play and careful research confirm these general principles.

Batter Types and Weaknesses

A right-handed batter who hits the ball into left field consistently is a pull hitter and ordinarily hits an inside pitch well. The signal should be for a low outside pitch, either a fast ball or a curve. If he is a right-handed batter and hits into right field consistently, he is an outside pitch hitter and prob-

ably swings a little late. The signal should be for a high inside pitch, since this type of batter will have difficulty getting around in time to meet the ball squarely. If the batter is left-handed and pulls the ball into right field consistently, he should be pitched low and outside. If he hits into left field consistently, he will in all probability have trouble with the high and inside pitch.

Normally, the straight-away hitter may be expected to hit to either field. Unless he shows other faults (see below), it is best to signal for pitches low and outside, whether a curve ball or a fast ball, with an occasional change of pace to keep him off balance.

Spotting Characteristic Batting Weaknesses

There are few batters who do not have some batting habits which prevent them from hitting all types of pitches well, and the ability to spot such characteristics and capitalize upon them is important to both pitcher and catcher. For example:

When a batter takes a short stride, he often will have trouble hitting a pitch that is low and to the outside corner of the plate. A batter who lunges or overstrides is usually not a good hitter; he will have particular difficulty in hitting a fast ball pitched high and on the inside corner of the plate, a curve ball and change of pace low and on the outside corner. Mixing the curves and change of pace will keep him off stride.

A batter who presses with his back arm as he starts his swing usually drops the end of his bat; he will have difficulty in hitting a fast ball pitched high and inside.

A batter whose stride pulls him away from the plate usually has difficulty hitting a ball pitched low and on the outside corner of the plate.

A batter who does not shift his weight to his front foot on his forward stride usually will have difficulty hitting a low outside curve or a low outside fast ball.

If a batter steps in toward the plate on his stride, a fast pitch high and inside will often be the one he cannot hit well.

A batter who crouches at the plate ordinarily will have difficulty with high inside pitches, while a batter who stands upright will have similar difficulty with a low outside pitch.

A batter who is "twitchy" at the plate, with a tendency to swing his bat back and forth repeatedly, is vulnerable to the waiting treatment. If the pitcher takes his time, he will often catch the batter off balance, particularly if he delivers the ball as the batter swings his bat forward. Such a hitter is also inclined to go after bad pitches. A man who is particularly tense will tend to grasp the bat so tightly that his knuckles show white. A catcher who spots white knuckles will often find a curve ball or change of pace effective pitches.

Football has an old saying, "When in doubt, punt." The baseball equivalent might well be, "When in doubt, throw the low curve ball." The pitcher and catcher who have no other standards for judgment of a batter's weakness will generally find this pitch the safest.

Sizing up specific hitter's weaknesses is, of course, an art in itself. The principles given above will be of some help, but experience will still be the best teacher. All pitchers and catchers on the squad should take advantage of every opportunity to watch batters hit. They can learn much by observing their own teammates, and it is particularly important that they watch the opposition in pregame warm-up and batting practice.

THE CATCHER AND PITCHER WORKING TOGETHER

Each pitcher has a type of pitch—fast ball, curve, change of pace, or some unorthodox variety—upon which he relies and in which he has confidence. Whatever the pitch may be, it is an important part of his equipment, since he believes in it. One of the catcher's first jobs at the beginning of practice for the season is to learn the most effective pitch for all the hurlers he is likely to handle.

In general, overhand pitchers with a good fast ball are more effective pitching high and inside. Sidearm pitchers with a good fast ball are effective pitching low and away from the

plate. Pitchers who are not so fast but have a good curve ball should ordinarily pitch low and over the outside corner of the plate.

Many pitchers, when under pressure, will tend to rely heavily upon their favorite pitch, the one they feel to be most effective. The catcher's judgment in this situation is more objective, and when there is a runner in scoring position, and the batter has a known weakness, the catcher will often prefer to call for pitches to this weakness instead of calling the pitcher's favorite pitch.

The catcher should call all plays when the pitcher fields the ball and has a throw to make. The catcher sees the play, while the pitcher usually has his back to it.

Confidence in each other is an important characteristic of a good battery, and ordinarily there should be no great disagreement in calling pitches. If the catcher has experience, and the pitcher has confidence in him, the pitcher will generally accept the signals. There may be occasions, however, when the pitcher feels he can do better with a different pitch than the one which the catcher has called, and that should be his privilege. He can ask for a change of signal by merely wiggling his gloved hand or shaking his head. The catcher may then give another signal. If, however, the catcher again repeats the same signal, ordinarily it should be accepted. Differences in personality and experience, of course, modify any situation, and specific procedure may have to be worked out on an individual basis.

Practical psychology has a lot to do with good battery work, and it is the job of both pitcher and catcher to understand his co-worker. Some players respond best to criticism, and sometimes even insult; others need encouragement and gentle handling. Traditionally, the catcher is the balance wheel of the entire team, particularly of the battery, and most of the responsibility for a good working relationship is in his hands. When one of the great pitchers of modern time made baseball's charmed circle by pitching his second no-hit, no-run game, he pointed to his catcher and told reporters in the

dressing room, "That's your boy. He didn't call one wrong all afternoon."

Few catchers will ever call a perfect game, and even fewer pitchers will ever pitch one, but the extent to which they are able to approach perfection in their working relationship will have much to do with the success of any team.

Pitchouts

The author almost lost a ball game once when he told one of his inexperienced college pitchers to throw a waste ball to a good hitter. The pitcher promptly threw it waist high, and it immediately disappeared from the premises. That unhappy result could have been avoided by using the more common name, pitchout; but regardless of what it is called, the pitchout is an important device in defensive play.

The pitchout is a pitch thrown in such a way as to be difficult, if not impossible, for the batter to hit. At the same time, it sets up the catcher to make a throw, or gives him clearance to make a play at the plate, depending upon the situation. When the play is to be made, a signal for a pitchout is given and in turn is transmitted to all members of the defensive team so they will know it is "on." This permits them to break from their positions with the pitch and back up plays in their territory.

When the pitchout is called for pick-off throws from the catcher to any base, it normally should be called with two outs and the score close—and then only if there is good chance of getting the runner. With none or one out, a bad throw will advance the runner and his chance of scoring becomes greater since more batters will have an opportunity to drive him in. When the pitcher has poor control, the pitchout should not be called. He will throw enough of them anyway.

When the catcher's team is runs ahead, the opposition is not likely to take chances. The logical play, therefore, is to get the hitter, since there is little chance of a successful pick-off. When the defense is runs behind, pick-off's should be attempted only when the catcher is sure he can get the runner.

If he does not throw well, the pick-off should not be attempted, since an erratic peg will give the opposing team an even greater margin.

With a right-hand batter at bat, a pitchout for a play at first or second base should be a fast ball, normally shoulder-high and outside the plate. However, with first base occupied, a right-handed pitcher pitching to a right-handed batter and the bunt situation up, a sidearm curve outside the plate can be an effective pitchout. As the batter follows the ball, the runner will have a tendency to take an extra step, anticipating the bunt, and will have more difficulty getting back to the base as the throw is made. For a play at third base it should be a fast ball shoulder-high and inside of the plate, regardless of the play situation.

With a left-handed batter at bat, for a play at second or third base the pitchout should be shoulder-high and outside the plate while the pitchout for a throw to first base should be high and inside the plate.

The pitchout is also used when a man is intentionally put on base with a deliberate base on balls. Pitchouts for intentional walks should be shoulder-high and outside of the plate.

The official rules state that a catcher must stay in his box until the pitcher delivers the ball. When an intentional pass is given a right-handed batter, the catcher should stand as far right in his box as possible. As the pitch comes in, he takes a cross-over step with the left foot and steps to the right with his right foot to make the catch. When the man being passed is a left-hander, this procedure is reversed.

It is important that the intentional base on balls be called only in the proper situation. Generally, it should be given when first base is open, and second (or second and third) base is occupied; there should be at least one out; the man at the plate should be a good hitter. If weak, play him. Thus the defense plays for a double play at second and first when there is one out, and plays the batter with two outs.

It is worth repeating that the pitchout should be used only when the entire defensive team knows it is on; this is particularly true if a pick-off play is involved.

CHAPTER 6

PLAY OF THE FIRST BASEMAN

QUALIFICATIONS

A question that comes in for much discussion in baseball is whether a first baseman who throws left-handed has an advantage over a right-hander. The answer is a qualified "yes." He has one slight advantage. When throws are to go to second or third base, his left, or pivot, foot is usually set as he fields the ball. As he makes the catch, he merely has to step in the direction of the throw. The right-handed first baseman must make a body turn on all throws to second and third bases. All other things being equal, this advantage is so slight that it is almost negligible.

Size is an asset for a first baseman in that a tall man has a longer reach for erratic throws and also gives the fielder throwing to him a better target. However, a player of ordinary size who is quick and active on his feet will offset height advantage. A talent for good footwork is particularly important, both in playing the bag and handling batted balls.

TECHNIQUE

Footwork in Taking Throws

In catching a thrown ball for a put-out at first base, the first baseman should take an open stance in most cases. This will give him better body balance and will enable him to shift his arms and feet to better advantage for pick-ups and low throws. When any other infielder fields a batted ball and the throw is to go to first base, the first baseman hustles from his fielding position to an initial position on the second base side of first base. He places his feet a few inches in front of the base, approximately the width of the base apart, facing the player making the throw.

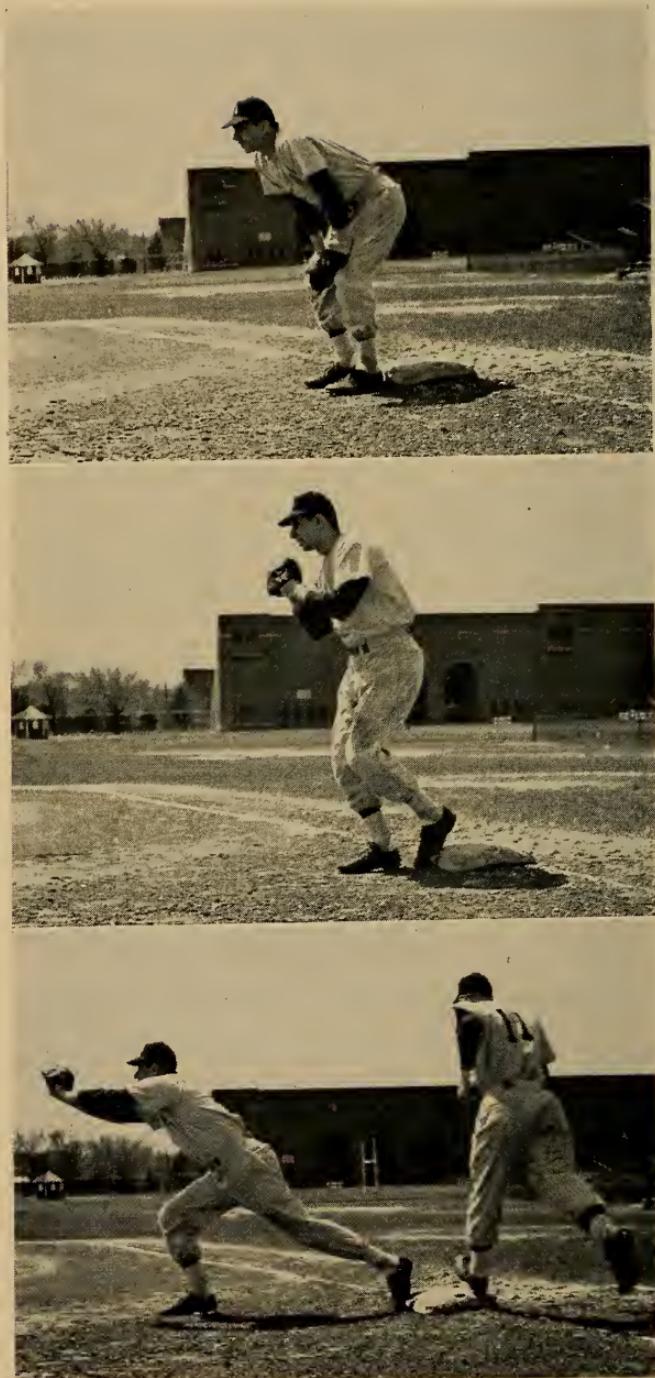


Fig. 71.—Shift for throws to the right.

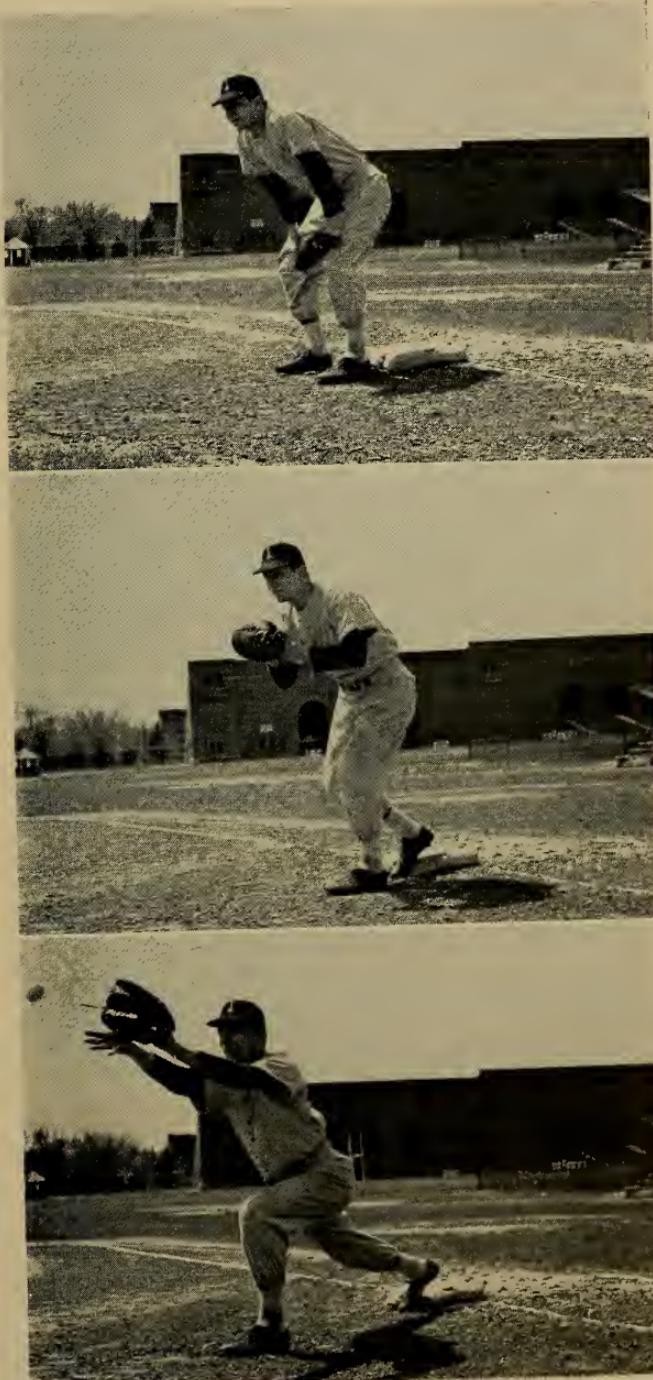


Fig. 72.—Shift for throws to the left.

If the ball is thrown directly to him, he places the toe of either foot against the second base side of first base, steps well out into the diamond with the other foot, and reaches for the ball. If the play is close, he should reach and stretch out as far as possible, catching the ball a trifle sooner. It may be the difference between the batter-runner being called out or safe. As soon as he catches the ball, he pulls his contacting foot off the base. He pivots into the diamond, and faces the infield, getting out of the way of the runner, ready for another possible play. Regardless of his position, after he catches the ball, the first baseman should always step out of the way of the runner to avoid a collision.

If a throw is to his right, he places the toe of the left foot against the infield side of first base, close to the heel of his right foot. He then steps out toward the throw with his right foot to catch the ball (Fig. 71).

If the ball is thrown to his left, he places his right toe against the second base side of first base, close to the heel of the left foot. He then steps toward the throw with his left foot to catch the ball (Fig. 72).

If the first baseman is pulled off the base and toward home plate on the throw, he should tag the runner coming to first base. The ball should be held in both hands to avoid the possibility of having it knocked from his hands as he tags the runner. There are occasions, however, because of the speed of the play, when the runner can be tagged only with the ball in the gloved hand.

The first baseman should attempt to catch all poorly thrown balls which hit the ground on the short hop. On short hops he uses the shifts just described for throws directly to him, to his left or to his right, except that he stretches as far as he can, always attempting to catch the ball at the instant it comes off the ground (Fig. 73).

If the first baseman cannot catch the ball on the short hop, he should shift across the base into foul territory and play the long hop. If the throw is to his left, he should step back and across the base with his right foot, placing the toe

of this foot on the foul territory side of first base. He shifts his weight to the right foot and steps back across the base with his left foot to make the catch.

If the throw is to his right, he steps across the base with his left foot to the foul territory side of first base, and places the toe of his left foot on the corner closest to right field. To make the catch, the right foot is brought back into foul territory. As soon as the ball is caught he steps into foul territory out of the way of the runner and faces the infield ready for a possible play. In Fig. 74 the long hop is directly to the first baseman.



Fig. 73.—The reach for a short hop.

On a high throw directly to him, the first baseman may have to leap into the air to take the ball. He then should come down on the infield side of the base with the toe of either foot, the other foot coming down a comfortable step into the diamond. If the ball is thrown high and to his left, normally he will come down on the base with the toe of his right foot (Fig. 75); if the throw is high and to his right,



Fig. 74.—Shift for a long hop.

with the toe of his left foot. As soon as he touches the base and makes the out, he should pull his foot off the base.

If the first baseman cannot make the catch with either foot in contact with the base, he will, of course, have to leave it completely, and then try for the out.

The ball should be caught with both hands whenever possible. However, on some wide throws, he can reach with just the gloved hand, which may give him the necessary stretch to catch the ball and at the same time keep contact with the base.

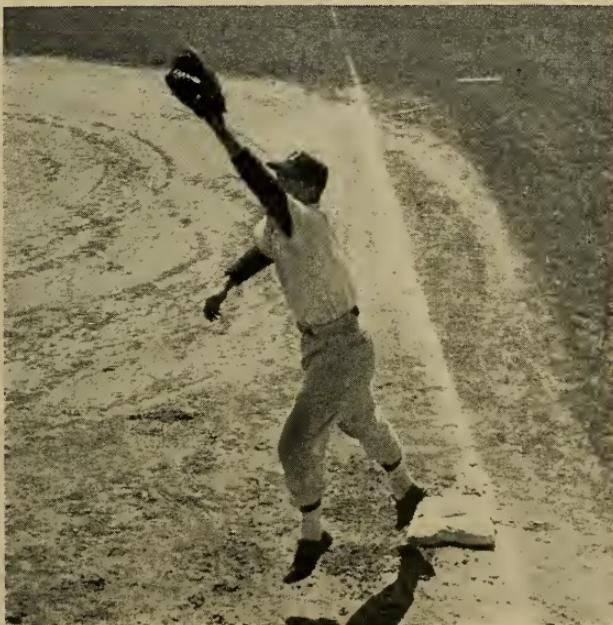


Fig. 75.—The jump for a high throw to the left.

When the throw comes from the home plate area of the diamond, the first baseman faces the play and places his left foot on the second base side of first base, his right foot a comfortable step into the diamond toward second base, toes pointed toward the player who throws. This stance gives a good target.

Should the throw be to the foul side of first base, the first baseman steps across the base with his left foot. He then

places his right foot on the foul territory side of the base and follows with a step to the left with the left foot to make the catch. He pivots off the base into foul territory as soon as the catch is made, facing the infield ready for any other play (Fig. 76).



Fig. 76.—Shift for a throw from the home plate area to the foul side of first.

Playing Ground Balls

The fielding position the first baseman takes depends upon his ability to field ground balls and various game conditions: the score, the number of outs, the type of batter at bat, the

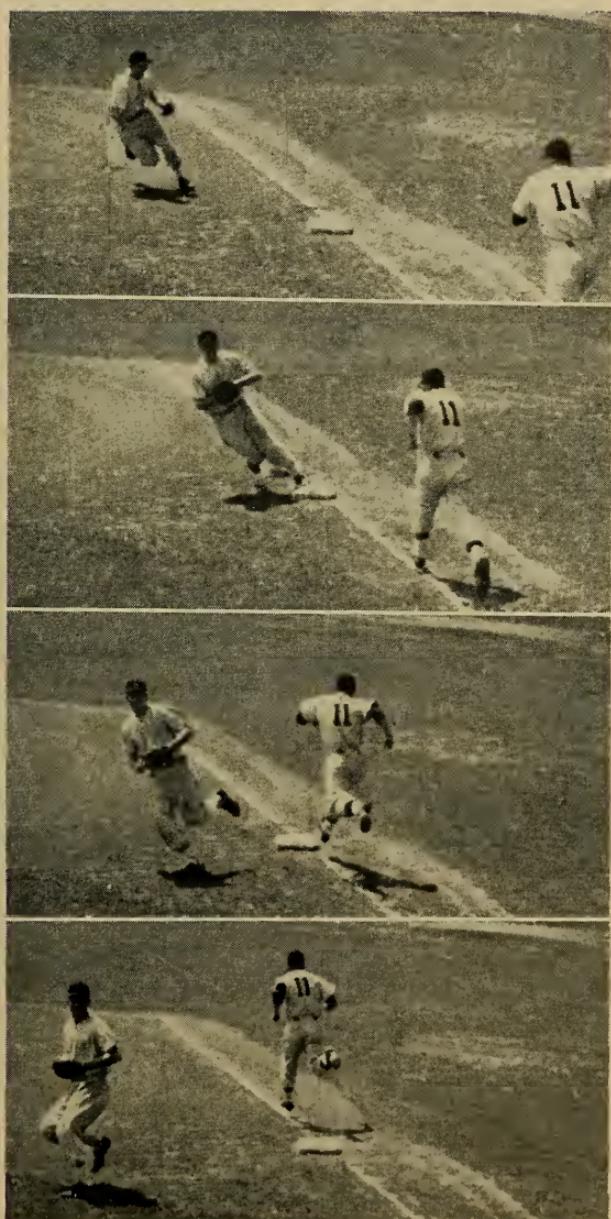


Fig. 77.—Making the put-out unassisted.

call on the batter, and the runner on base. He should attempt the field all ground balls hit in his territory except those hit slowly to his right which the second baseman may play. The second baseman should always call this play when he can make it.

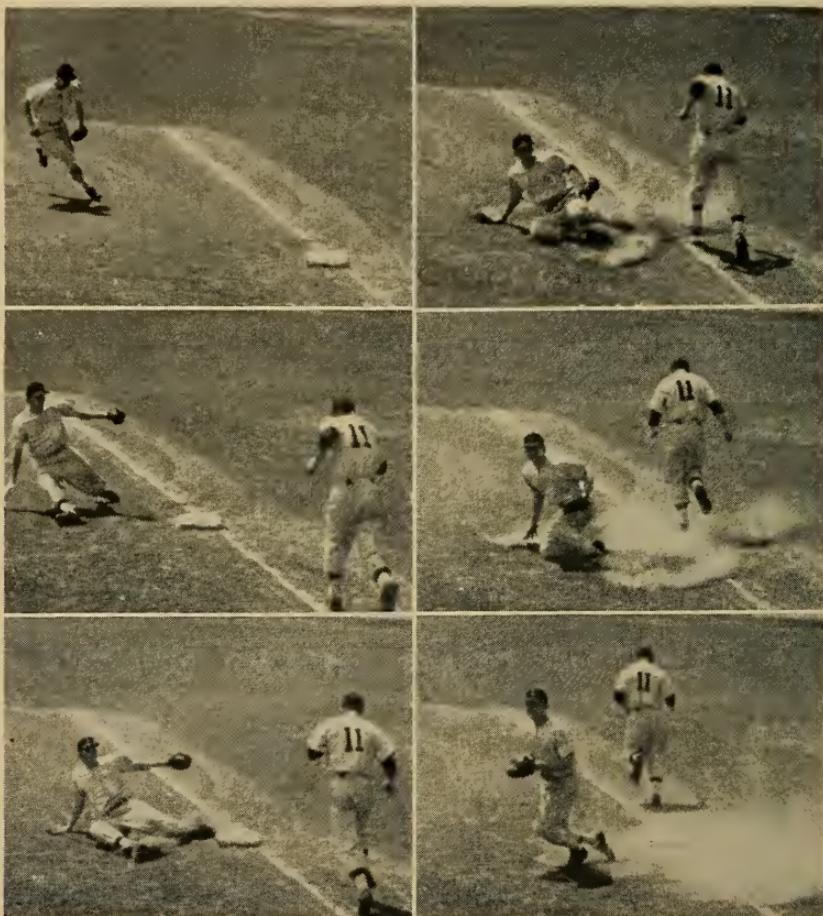


Fig. 78.—Sliding into first for a close put-out.

Since the pitcher runs to cover first base on all balls hit to the left of the pitcher's mound, the first baseman, as soon as he fields the ball, must decide immediately whether he himself can make the put-out unassisted. If he can, he should call to the pitcher or wave him away at once. When he fields

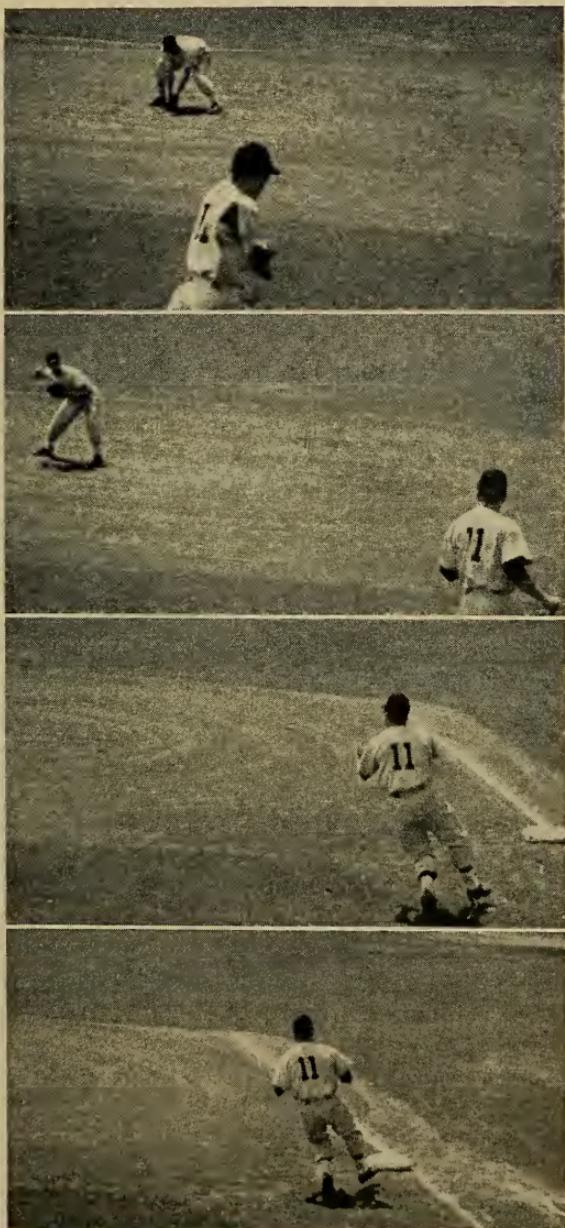


Fig. 79.—Throwing to pitcher covering first.

the ball well behind the line between first and second, the first baseman hustles to the base, steps on the infield side of the bag with his left foot and immediately turns into the diamond so as to avoid a collision with the batter-runner (Fig. 77).

When the ball is fielded close to the base line between first and second base, he runs across the base into foul territory and immediately turns toward the infield, ready for a possible play.

When the play is close and there is a possibility of a collision with the batter-runner, the first baseman should slide feet first into the base (Fig. 78).

When the first baseman cannot make the put-out himself after fielding a ground ball, he throws to the pitcher covering first base. On a ball hit to his right, the first baseman will often field the ball and have to make a quick throw from the position in which he fields it. As soon as the ball is caught, he pulls his gloved hand away, showing the ball to the pitcher as quickly as possible. He makes a snap sidearm or overhand throw, directed so that the pitcher receives it chest high and at a point about two steps from first base (Fig. 79). If the pitcher has not reached a point in his run so that the ball can immediately be thrown to him, the first baseman should take several running steps toward the bag, pull his gloved hand away from the ball, and then toss it underhand when the pitcher is, again, about two steps from the base.

On occasion, the first baseman will fumble the ball, or a ball will be hit slowly enough so that the pitcher can reach first base before the first baseman is ready to throw. In this situation the pitcher should stop at the base, put one foot on it, and step out with the other foot for the catch, the first baseman throwing directly to the base. The throw should be snap overhand or sidearm.

When a Runner Passes First Base

On any possible extra-base hit, the first baseman should watch the runner to see that he touches first base. On a two-base hit to left field, the first baseman should trail the runner

at a distance of forty or fifty feet after he passes first, and then swing over in line with the throw from the outfield to back up the play. He also should be alert to back up second base on any single hit to left field. When none of the bases are occupied, or if first base is occupied and a fly ball is hit to left field, he should leave the base only far enough to get into position to retrieve the ball, should there be an overthrow.

If the second baseman and shortstop go back after a fly ball leaving second base uncovered, the first baseman should cover second, provided it is not covered by the third baseman or pitcher.

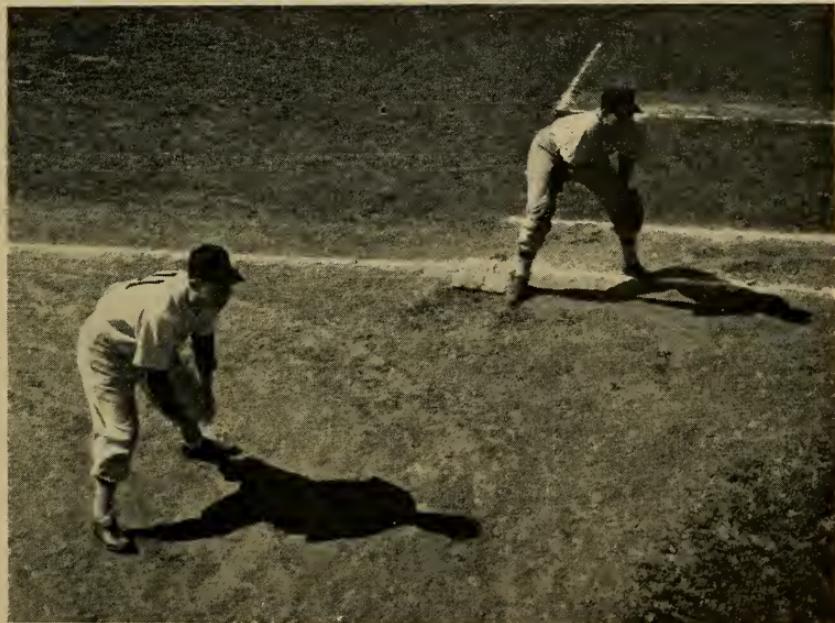


Fig. 80.—Holding a runner on first.

Position When Holding a Runner on First Base

When holding a runner on first base, the first baseman may straddle the corner of the base nearest the pitcher's mound, or he may place his right foot against this corner and his left foot close to the foul line (Fig. 80). If he is of medium height, he will usually straddle the corner of the base; if taller, he will usually take a position with the right foot against the

corner of the base. Either position places him clear of the runner when he returns to the bag. When the pitcher throws to first base to catch a runner, the first baseman is also in good position to catch the ball, and if the runner slides back into the base, he can easily be tagged. As he catches the ball the right-handed first baseman turns right toward the runner, drops his gloved hand and may drop to his left knee as he reaches for the tag (Fig. 81). The left-handed first baseman can often place the ball in his gloved hand and touch the runner lightly as he slides back to the base.

When a Bunt is Expected

When first base is occupied and a bunt is expected, the first baseman runs toward home plate as the pitcher starts his delivery. This run should not be straight down the first base line toward home plate; the first two steps should be at a forty-five degree angle into the infield. If the ball is bunted hard and to his right, he is then in a good position to field it and make a possible force-out at second base. If the ball is bunted in front of him, he hurries in and fields the ball. After the ball is fielded by the first baseman, the catcher should call and tell him where to make the throw.

When a batted or bunted ball rolls slowly along the first base line in fair territory, the first baseman should permit the ball to roll if he cannot make a play on the batter-runner. The ball may roll foul. If there is a runner on base, he must be alert so that this runner will not advance an extra base. When a ball is batted or bunted close to the first base line and is in foul territory, he should touch the ball as soon as possible, since it may roll fair.

The first baseman should cover first base when the ball is bunted into the third base or home plate area of the diamond except when the catcher covers third base, when the first baseman fields the ball, or when the force-out is being played at third base. In the first case, the first baseman covers home plate and in the second, the second baseman always covers first base.

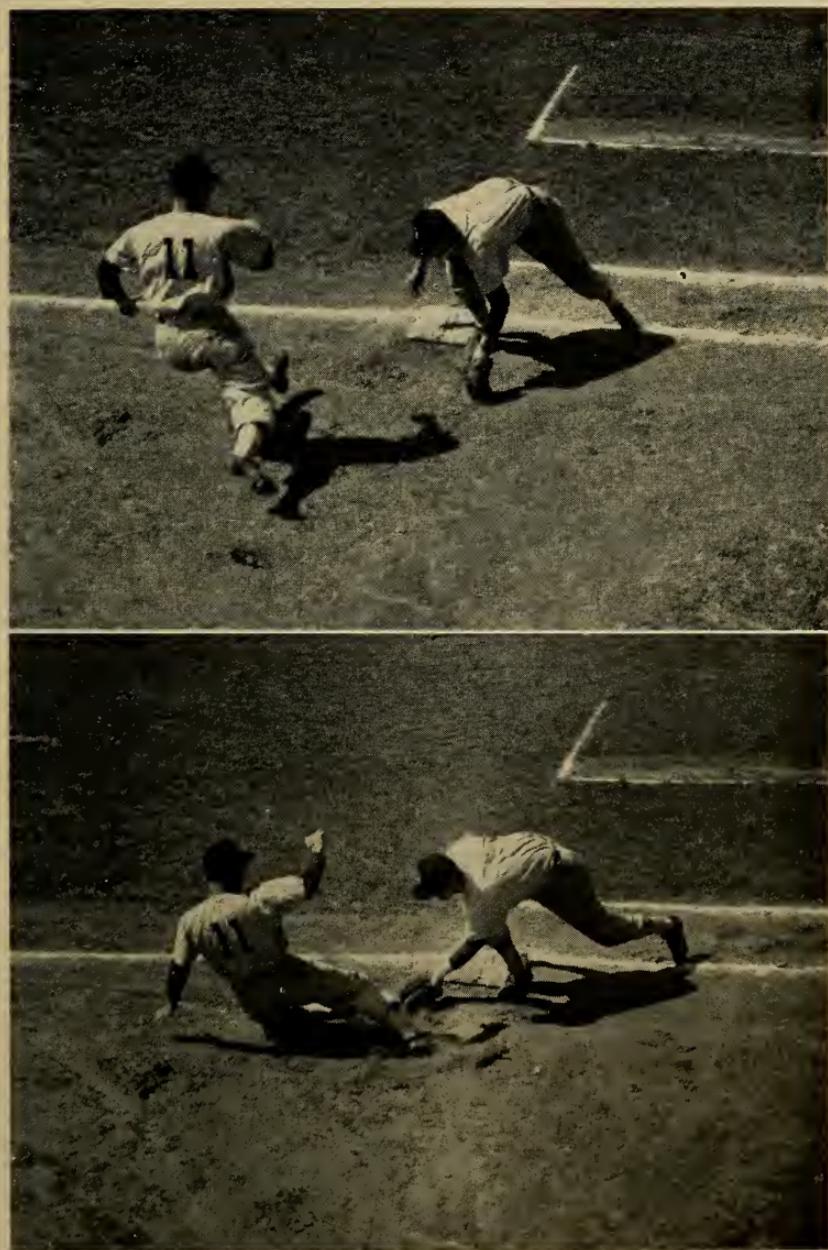


Fig. 81.—Tagging a runner at first.

The Force-Out at Third Base

When first and second base are occupied, the score close, none out, and a bunt is expected, the first baseman takes a position approximately sixty feet from home plate and from ten to fifteen feet from the foul line. As the pitcher starts his pitch, the first baseman starts toward home plate, ready to field a bunt. If the ball is bunted and he fields it, his first objective is to throw to third base for a force-out. If this play cannot be made, the throw is to first base, the second baseman covering. The catcher should call the play by calling "one, one" or "three, three." It may be confusing to call "first, first" or "third, third." If the first baseman makes a throw to the third baseman which gets away from him, the first baseman should immediately back up home plate for a possible rundown play on the second runner who may make a long turn at third base or attempt to score, depending on the overthrow.

When a Bunt Is Not Expected

When first base is occupied and a bunt is not expected, the first baseman takes his position for holding a runner on first base. As the pitcher makes his delivery to the plate, the first baseman breaks toward second base, usually taking no more than two or three steps. The first step should be a cross-over step, the other steps glides, the right foot leading, the left following. By gliding in this manner he can readily recover, get back to his base and assume his fielding position for a throw, or move quickly either left or right to field a hard-hit ball.

When a left-handed pull hitter is at bat, the first baseman may take a position ten or twelve feet behind the runner, thus giving himself a better fielding position. When this position is taken, he should warn the pitcher, so that he will not throw to first base with the base not covered. To prevent the runner from taking a long lead off base, the first baseman should make occasional fakes toward first base.

The Pick-Off at First Base

Here are two pick-off plays that can be executed when first base is occupied. Usually a signal is given by the first baseman, and a pitch-out called by the catcher, though the catcher may call the play and be answered by the first baseman. It should also be understood that a throw for a pick-off may be made anytime the batter misses the ball in an attempt to bunt or hit. The runner usually takes an extra step as he sees the batter's attempt. The first baseman should therefore hurry to the base as soon as the ball passes the batter, ready for a throw from the catcher.

1. When a bunt is expected with a runner on first only and the pick-off signal is given, the first baseman takes several running steps toward his bunt fielding position as the pitch is made, luring the runner a step or two from the base. Just before the ball reaches the batter, the first baseman whirls back to the base to receive the throw from the catcher. The same play can be used when a bunt is not expected, except that the first baseman takes several running steps toward second base as the pitch is made and then hustles back to the base just before the ball reaches the batter.

2. When first and second bases are occupied, and the bunt is not expected, the first baseman will usually play behind the runner on first. The signal is again given and as the pitcher takes his position on the pitcher's plate, the first baseman takes a step or two toward home. As the pitcher delivers the ball, the first baseman runs to the base to take the throw from the catcher. Again, the play can be made when the batter misses the pitch, the first baseman hurrying to the base after the ball passes the batter.

The Force-Out at Second Base

When the play situation is such that after fielding a ground ball the first baseman may have a force-out at second, he should hold the runner on first if second base is open. (If both first and second bases are occupied, he should play his double play position in back of the runner on first base). When a right-handed first baseman fields the ball, he should always

turn to his right as he makes the throw to second, except on a ground ball that is hit hard to his left for which he must run diagonally backward. To stop his momentum, he should step across in front of his left foot with his right, pivot to his left, then brace the right foot as he steps toward second base with his left to make the throw.

The left-handed first baseman should be in such position as he fields any type of ground ball that he has his left foot braced and merely steps toward second base with his right as he makes the throw.

After the first baseman has made his throw, he hurries back to the base for the completion of the double play. He should turn back to his left, locate the base and then glance back over his right shoulder as he runs to the base prepared to catch the ball should it be thrown before he reaches the base. Should the ball be fielded directly over first base, the first baseman should make the put-out at the base, then throw to second. In this case the player who covers must tag the runner.

With Second Base Occupied

When a single is hit to center field or right field and a throw is made from the outfielder to the plate, the first baseman acts as a cutoff man unless that assignment has been given to the pitcher. He places himself on the line of throw approximately sixty feet from the plate; the distance depends on the throwing ability of the outfielder. If the throw is wide or late from home plate, the catcher calls, "Cut it off." The first baseman then catches the ball and is alert for a play on the batter-runner, if he continues on to second base.

Some coaches prefer to have the first baseman take all cutoffs from the outfield. In this case, the first baseman places himself similarly in line with the throw, regardless of the field from which it comes.

When the first baseman fields a ground ball and makes the put-out himself he should be alert for a possible play on the runner who has advanced from second to third on the

play. If the runner makes a long turn at third base and stops, the first baseman should rush at him until he declares himself, then make the throw. Should the runner continue on to home plate, the first baseman immediately throws home and continues on to back up home plate in case of a rundown.

With Third Base Occupied

When the first baseman fields a ground ball on the home plate side of first base, close to the first base line, and the runner on third base does not start for home plate but the batter-runner stops running, the first baseman should run directly at the batter-runner and tag him. He will then have both runners in front of him and can easily play the runner on third base, should he attempt to score. The same holds true if the ball is thrown to the first baseman and he is pulled off toward the home plate side of first base. If the runner from third base starts for home plate and the first baseman has a play on him, he immediately throws to the catcher and then backs up home plate in case there is a rundown.

With First and Third Base Occupied

The first baseman holds the runner on first. If the runner starts for second base on a steal, the first baseman calls, "There he goes," and if the pitch is delivered to the batter, the first baseman follows the runner a short distance toward second base. If the throw from the catcher to the shortstop is in ample time for a play at second and the runner should stop, the first baseman is in good position for a rundown. Should the runner from third base start for home plate any time the first baseman has the ball, the first baseman should play the runner from third base, ignoring the runner advancing to second, provided the run would be a deciding factor in the game. This would not be true with two outs, when the runner going to second can be put out before the runner from third scores.

With All Bases Occupied

In the latter part of the game when the play situation calls for a force-out at home plate, the first baseman should play

on the line between first and second bases, or ahead of the line; it depends on the batter. If a ground ball is fielded by the first baseman, the play should be made at home, even though the ball is fielded close to first base. Should he step on first base for the put-out and then make his throw, there is no longer a force-out situation at home; this means the catcher must tag the runner coming in from third, which in turn means, even if the first baseman's throw is perfect, that precious time is lost.

POINTS TO REMEMBER

If the batter-runner in running to first base does not stay within the three-foot lane the last forty-five feet before reaching the base, and interferes with the man taking the throw, he is automatically out. Such an infraction should be called to the attention of the umpire immediately.

When first base is occupied and the runner starts for second, the first baseman should always alert the catcher by calling, "There he goes." This is especially helpful with a left-handed hitter at bat.

When the catcher leaves home plate to cover third or leaves home plate for any reason with third base occupied, the first baseman should be alert to cover home plate if it is not covered by another player.

When third base is occupied and a ground ball or thrown ball is fielded on the home plate side of first base, the first baseman should run the batter-runner back toward home plate, if he stops. This will help to prevent the runner on third from scoring.

CHAPTER 7

PLAY OF THE SECOND BASEMAN

QUALIFICATIONS

Since more batters reach first base than any other, the second baseman is in position to make a larger variety of plays than any other infielder. Not only must he be able to field all types of batted and thrown balls with speed and accuracy, but he must be alert to all offensive situations; he is required to shift his fielding position more than other infielders. His throwing arm, body movements, and mental reactions must be quick.

A husky physique is not necessary, although a player of rangy stature has an advantage when he covers second base on the double play, followed by the throw to first base. The taller player, because of his height, will have clearer vision and because of his longer reach and stride, can better clear the incoming runner.

FIVE DOUBLE PLAYS THE SECOND BASEMAN STARTS

With First Base Occupied

1. The ball is hit on the ground at the second baseman. He fields and throws the ball to the shortstop, who covers second base and in turn throws to first base.
2. The second baseman catches a line drive, then throws directly to first base.
3. The second baseman fields a ground ball close to second base, steps on the base, then throws to first base for the double play.
4. The second baseman fields a ground ball close to the base line, touches the runner coming from first base, then

throws to first base. When the runner runs out of the base line to avoid being tagged, he is automatically out. If this happens, the second baseman should not chase the runner but should throw immediately to first base, at the same time calling the infraction of the rule to the umpire's attention.

5. The second baseman fields a ground ball close to the base line; the base runner from first base stops and starts back to first base. In this case, the second baseman should throw the ball to first base, getting the batter-runner. The first baseman then plays the runner who was on first base for a rundown.

The second baseman may take the short throw on the rundown. If, however, the runner is too close to the second baseman, the throw goes to the shortstop who covers second base; the second baseman then swings over to back up the first baseman.

TECHNIQUE OF SECOND BASE PLAY

Fielding and Throwing for the Force-Out at Second Base

On all plays in which the second baseman fields a batted ball and makes a throw to second base for a force-out, he should try to make his footwork as simple as possible.

To make his throw after he fields a ground ball to his left, he should pivot to his right on his left foot and swing the right foot in back of the left. He then steps out with his left foot so that his feet are fairly well on a line toward second base and completes the throw (Fig. 82). If he can come to a full stop and set himself, he pivots right on his right foot and steps toward second base with his left foot to make the throw. He should not stand upright, but stay in a semi-squat posture as he pivots (Fig. 83). As he throws, he may rise slightly, but the quicker the play the less he should raise his body. The turn is made to his right, facing the runner coming from first base. As this play is speeded up, it will become a jump shift, the right foot coming down first, the left stepping out slightly in the direction of the throw.

On a long, deep play to his left, if he cannot get in front of the ball, he may use a cross-over step with his right foot

Pivot After Fielding Ground Ball

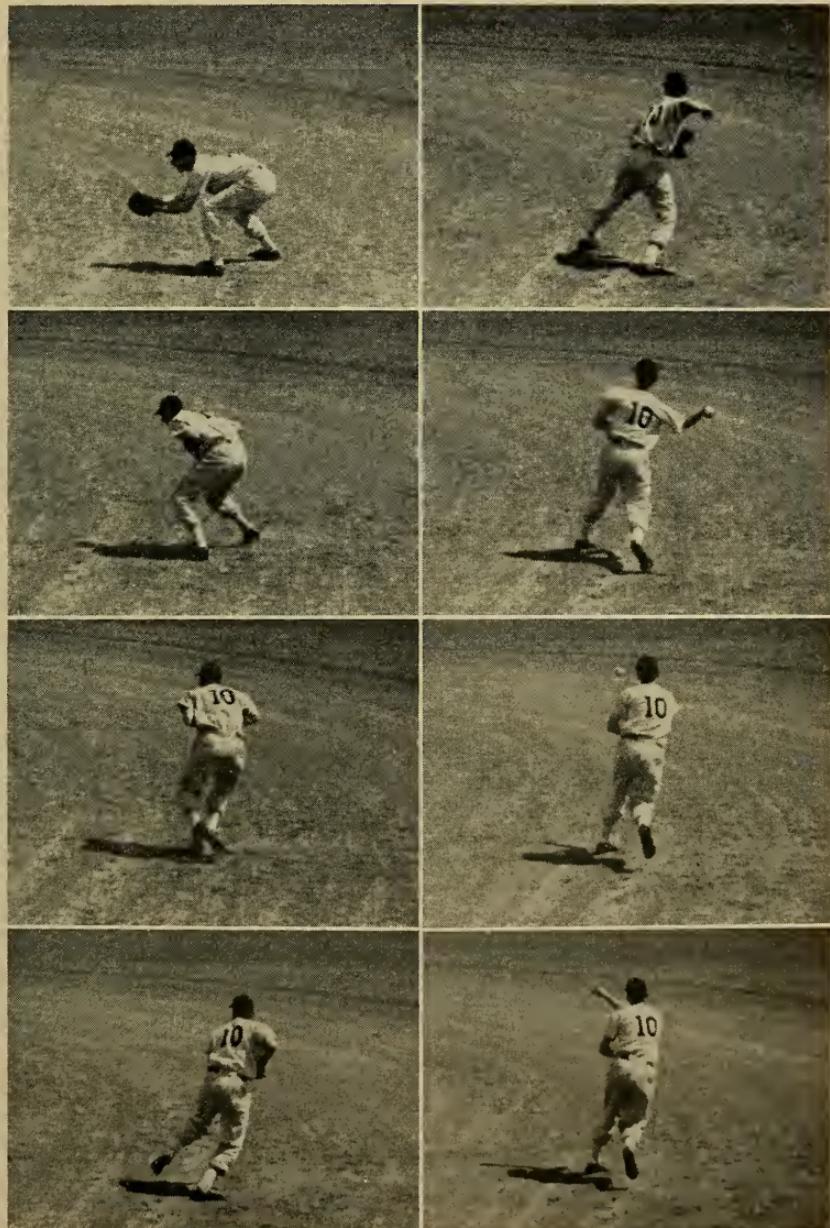


Fig. 82.—Hit to the left.

in front of the left, bracing the right. He should make a turn to his left at the same time and step toward second base with his left foot to make the throw. This is the only occasion on

Pivot After Fielding Ground Ball

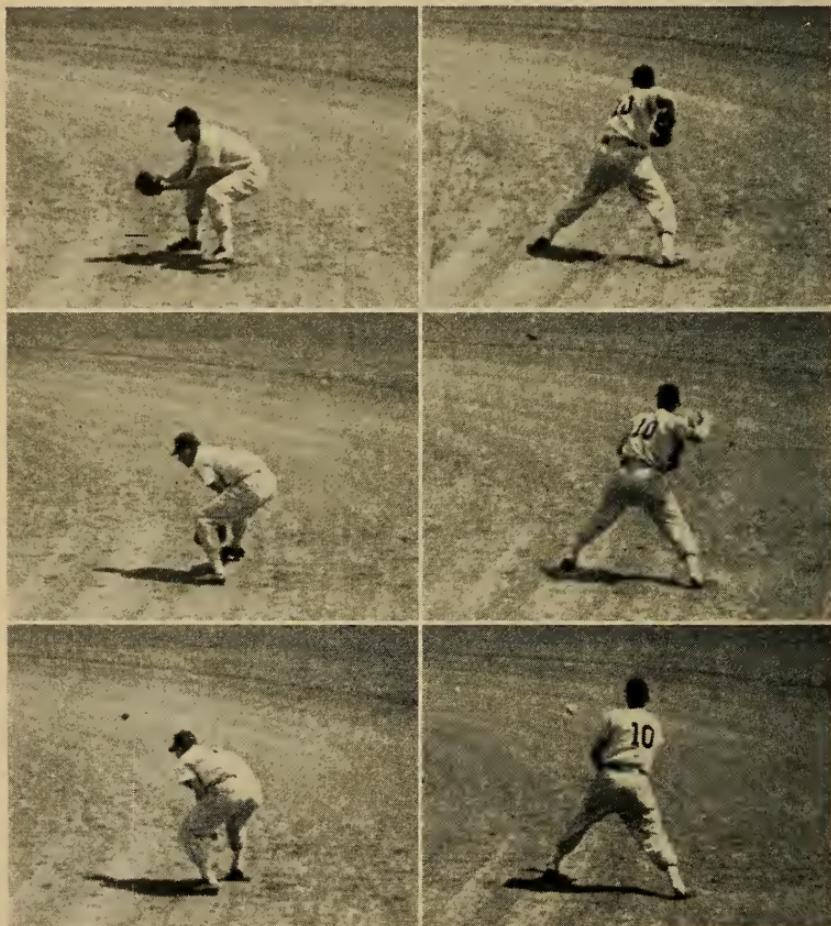


Fig. 83.—When set.

which the second baseman should make a left turn when throwing to second. A snap throw, either overhand or sidearm, should be used.

When the second baseman is moving toward second base to field a grounder, he immediately pulls his gloved hand away

from the ball so that the shortstop can see it. Then, using only the forearm and wrist, he tosses the ball underhand to the shortstop.

Pivot After Fielding Ground Ball

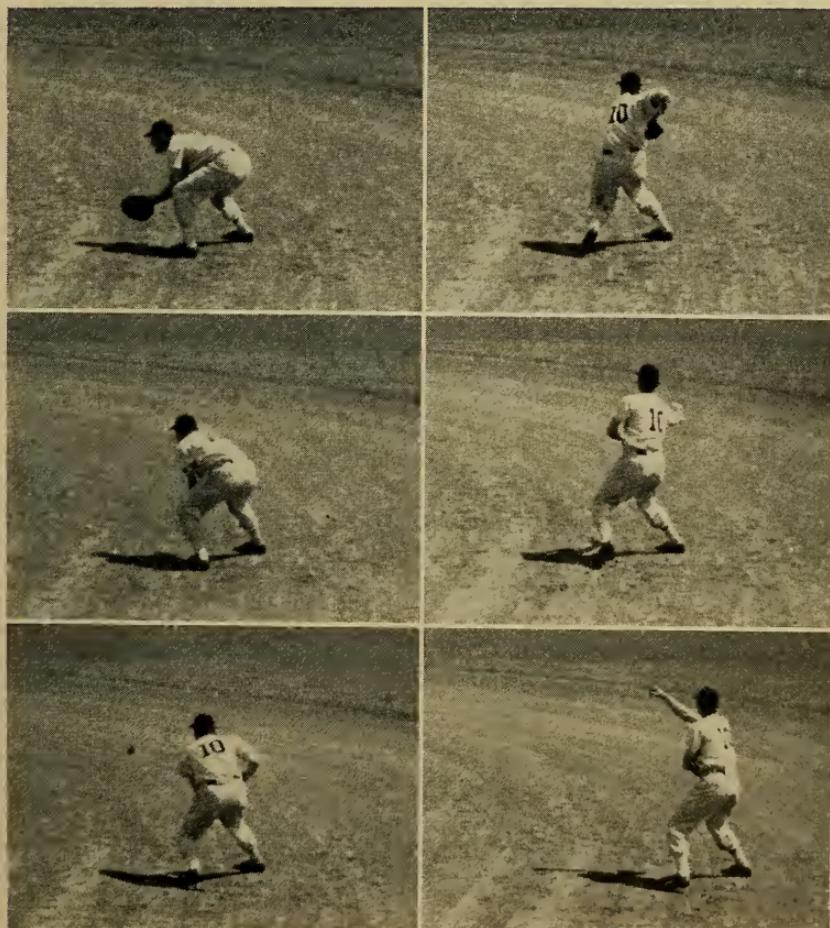


Fig. 84.—Medium distance from second.

If the second baseman is only a step or two from the base he should step on it for the force-out, then make the throw to first base himself. This action is just as fast as a close toss and the chance of an error is eliminated. If he can make the play, he should call, "I've got it," so that the shortstop will not interfere with him.

When the second baseman is a medium distance from the base and a ground ball is hit directly to him, he fields the ball, pivots to the right on the balls of both feet, so that the toes are pointing toward second base, and then makes the throw. The throw is usually a short overhand snap throw from a squat position (Fig. 84). On a longer throw the second baseman will have to use body, arm, and leg power to get speed and distance.

On a ball fielded directly behind second base, the second baseman may backhand the toss from the gloved hand to the shortstop. This is possible only if the throw is short.

When the ball is fielded only a short distance from the base and he cannot make the play himself, the second baseman may toss the ball out of both hands with a flip of the wrists. The palms of the hands should be turned toward the shortstop as he starts the toss.

Making the Force-Out and Throwing to First Base

There are several ways in which the second baseman may shift his feet at second base to catch the ball for a force-out and throw to first base.

He times his run so that he is just a step away from the base as the ball is thrown to him. If the throw is accurate, and the runner is far enough away that there is no danger of interference, the second baseman steps on the base with his right foot just as he catches the ball. He steps toward first base with his left foot to make the throw.

If the runner is close to the base and on the outfield side of the base line, the second baseman steps on the third base side of second with his left foot, then steps into the diamond with his right to make the throw (Fig. 85). On a very close play he may step on the same side of the base with his right foot, and step forward with the left as he makes the throw (Fig. 86).

If the runner is close and on the infield side of the base line, the second baseman may place his left foot on the near outfield side of second base, make the catch, and push

Making the Force-Out and Throwing to First

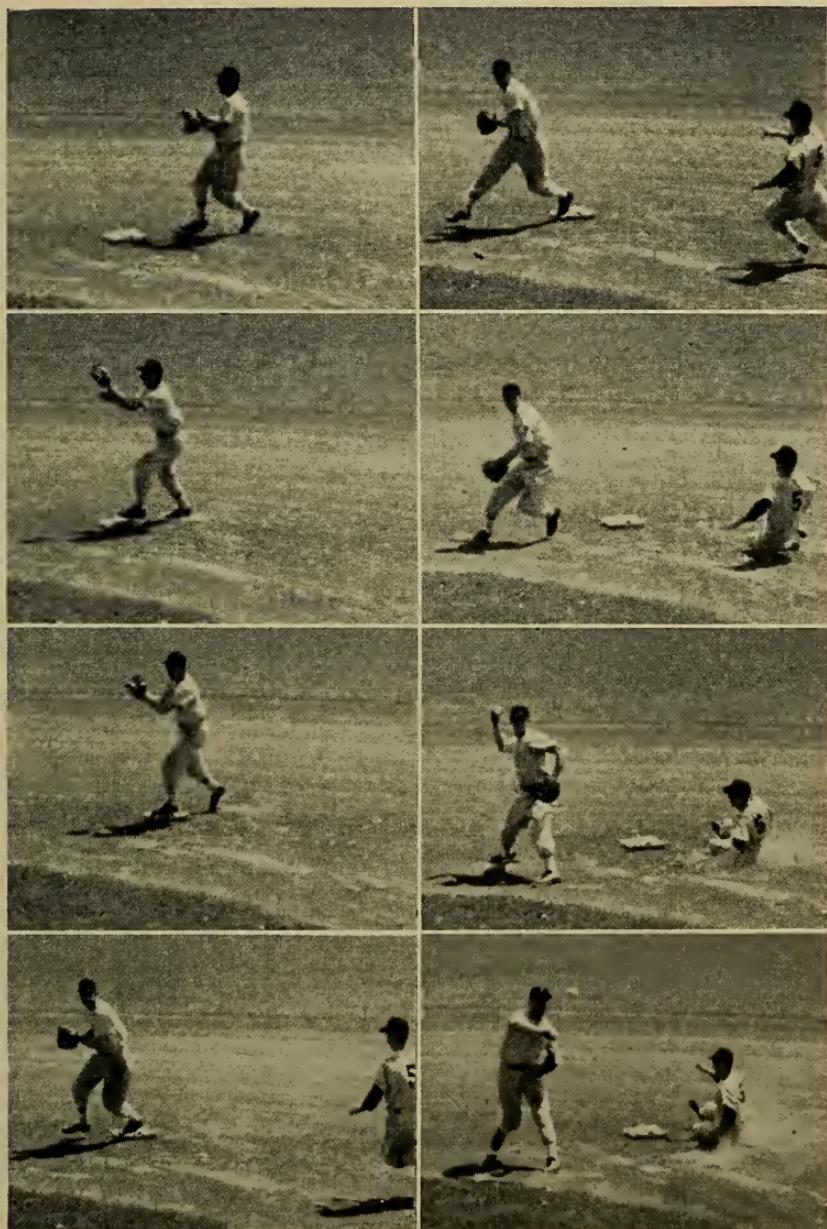


Fig. 85.—Stepping on base with the left foot and into infield with the right to throw.

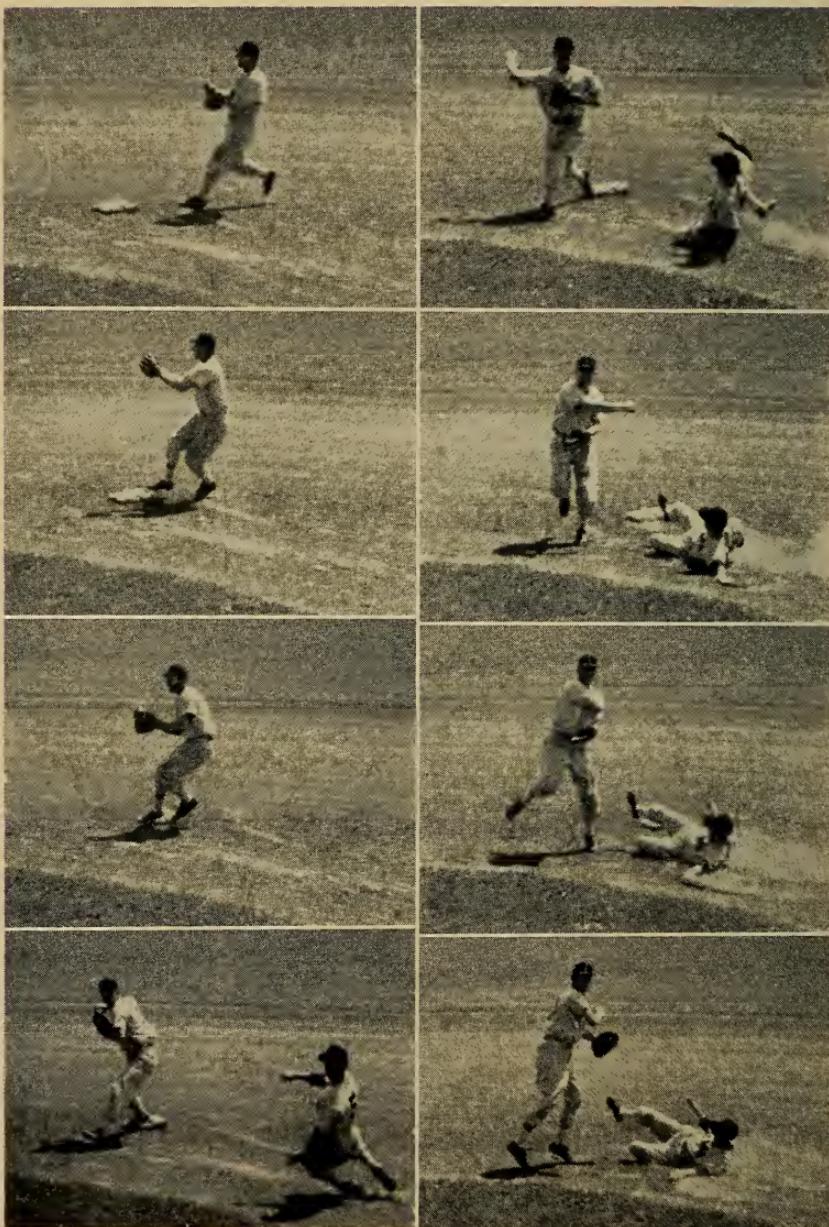
Making the Force-Out and Throwing to First

Fig. 86.—Stepping on base with the right foot and into infield with the left to throw.

Making the Force-Out and Throwing to First

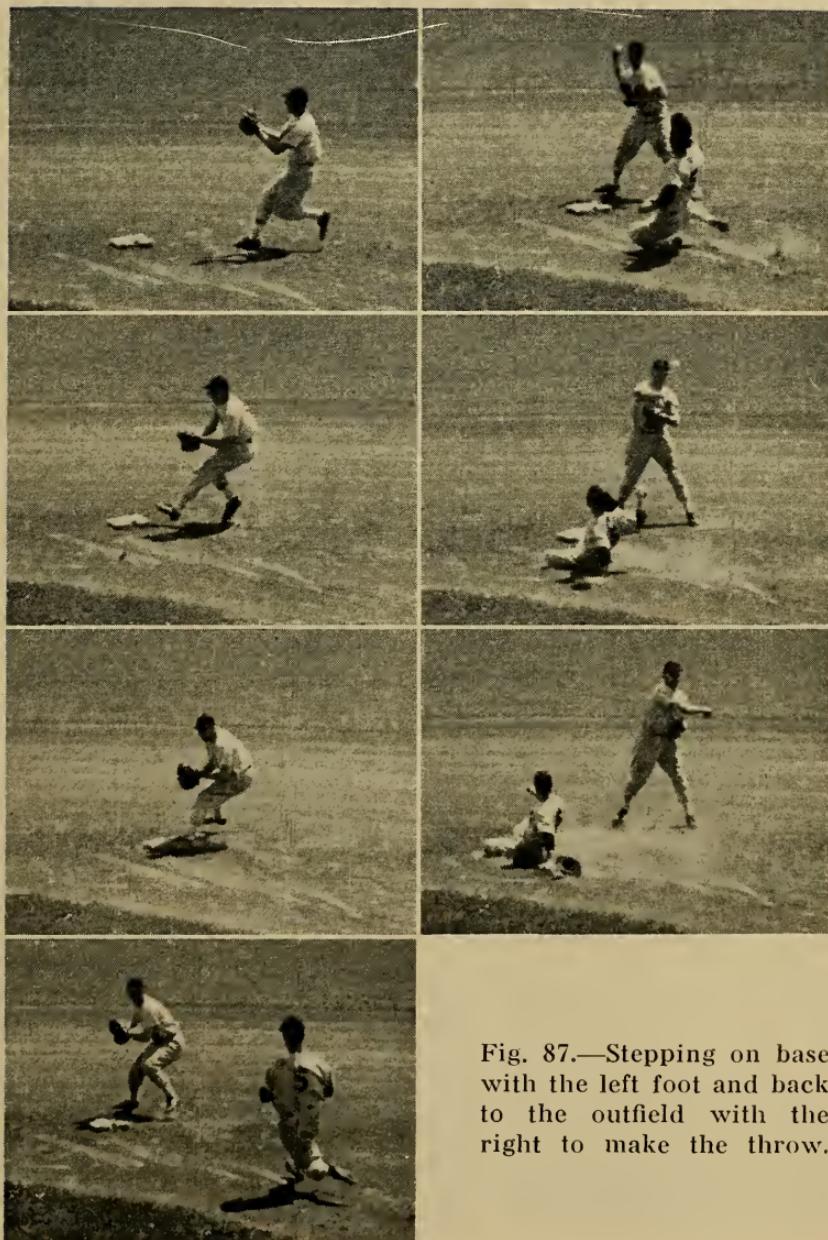


Fig. 87.—Stepping on base with the left foot and back to the outfield with the right to make the throw.

Making the Force-Out and Throwing to First

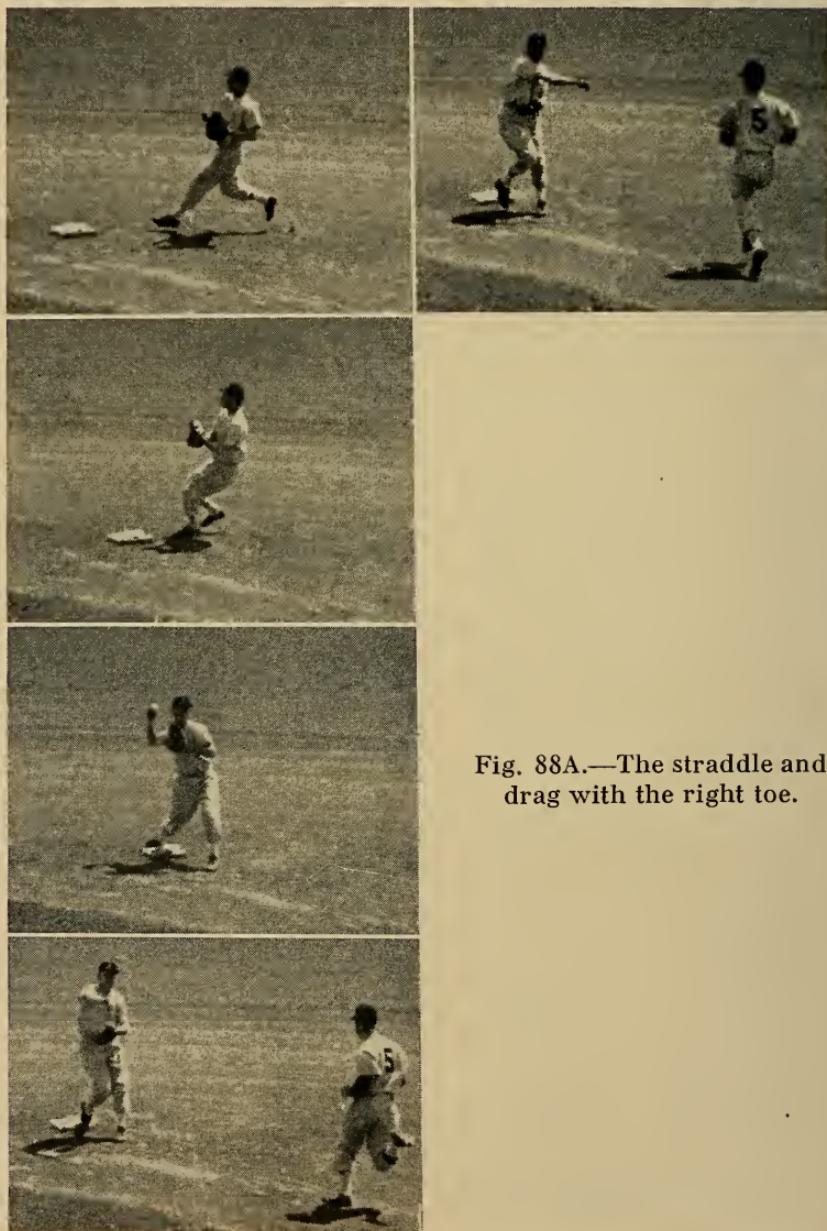


Fig. 88A.—The straddle and drag with the right toe.

Making the Force-Out and Throwing to First

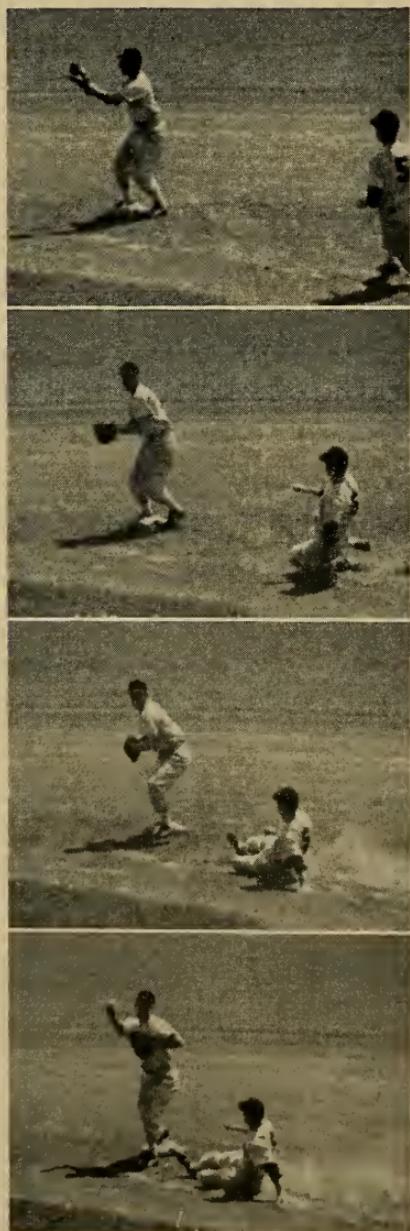


Fig. 88B.—The straddle and kick with the left foot.

back to his right foot. He then steps toward first base with his left foot to complete the throw (Fig. 87).

If the throw to second base is not accurate and the ball goes to the second baseman's right, he steps on the left field side of second base with his left foot, then steps out with his right foot to make the catch. He shifts his weight to the right foot and steps toward first base with the left to make the throw.

If the throw is to the second baseman's left, he places his right foot on the home plate corner of second base and steps out to his left with his left foot for the catch. If the runner is close, the second baseman steps forward with the right foot, after the catch, out of the way of the runner, then steps toward first base with the left foot to make his throw.

Provided the second baseman can get to the base quickly enough, he may straddle the base. If the throw is accurate, he steps out toward first base with his left foot, and drags his right toe against the left field side of second base as he makes the throw (Fig. 88A).

If the runner coming from first base is close to him, and on the outfield side of the line, the second baseman places his right foot just off the left field corner of the base; and if the runner is on the infield side of the line, back toward the center field corner of the base. As he catches the ball, he drags his right foot against the base, stepping out with the left foot for the throw. The step with the left foot is away from the base runner.

He may also straddle the base and, as the ball is caught, kick the first base side of the base with the left foot, then step out with the left foot for the throw. The step, again, is away from the base runner. (Fig. 88B).

If the throw is to the second baseman's right, he shifts his left foot to the left field side of the base, steps toward left field with his right foot and makes the catch. He then steps toward first base with his left foot to make the throw. On a throw to his left, he shifts his right foot to the first base side of second base and steps to the left for the catch,

then makes his throw. If the base runner is close, the second baseman catches the ball, steps forward with his right foot, then toward first base with his left foot as he makes the throw.

When the Bunt Is Expected

The second baseman moves over toward first base to such a position that he can cover first base if the ball is bunted and the first baseman cannot cover. Unless he has a pick-off play with the catcher, the second baseman should hold this position until the ball is bunted or until the pitched ball passes the batter. The offense may hit, and leaving too soon would leave a hole. When he covers the base for a throw, he should set himself with his left foot on the second base side of first base, his right into the diamond, giving the fielder a good target. As soon as he makes a put-out he should turn into the diamond, alert for a possible play at third base. If the first baseman covers, the second baseman backs up the throw.

When both first and second bases are occupied, and the bunt is expected, the second baseman always covers first base, since the first baseman will be playing in close for a possible force-out at third. In this case the second baseman should be alert for a possible play at home plate. (With a runner on second base and the bunt expected, the play is made the same as with a runner on first base.)

The Pick-Off at First Base

In the bunt situation, when the pick-off signal is given, a pitchout is called by the catcher. As the pitch starts, the second baseman leaves his position to take the throw at first base. He should not run directly to the bag, but to a point about ten feet in back of it, so that he can turn and run parallel to the base line.

As he comes into the base, he will then have the runner in front of him and can more easily make the tag. At the same time he is in good position to shift his feet, should the throw be wide. When the first baseman takes a pick-off, the

second baseman backs up the throw from the catcher, and then backs up the first baseman if there is a rundown.

On a pitcher-to-first-baseman pick-off, if the runner does not immediately break for second base, the second baseman should run forward to the base line so as to take a short throw from the first baseman for the rundown. If the runner breaks fast, forcing an immediate throw from the first baseman to the shortstop, the second baseman backs up the shortstop at second base. If the runner breaks immediately and then jockeys, forcing the first baseman to chase him, the second baseman backs up the first baseman.

Position on Balls Hit to the Outfield

The second baseman covers second base on all balls hit to left field until he is certain the shortstop can cover. He then backs up the throw from the outfielder.

On enclosed fields, the second baseman generally is designated to take all relays on balls hit into right field. As the ball is hit, he swings toward the outfielder making the play and if the ball is fielded cleanly, he returns to the base to take the throw. If the throw is wide or late, he should run toward it, acting as cut-off man; the shortstop comes in to cover. If the ball passes the outfielder, the second baseman runs toward him, at the same time glancing at the batter-runner so that he will know to which base to throw. He runs to a position where he will be in line with the throw from the outfielder and the base to which the throw is to go, close enough so that the relay can be caught on the fly. This is normally a distance of 125 to 150 feet. After he catches the ball, the second baseman should turn to his left to make his throw. If the runner stops at second or third base the second baseman, after he catches the ball, runs toward the infield ready to throw should the base runner attempt to advance.

When first base is occupied and a single is hit into right field and fielded cleanly, he should cover second base. The throw goes to third base; if it is wide or late for the runner who may attempt to reach third on the hit, the shortstop should cut off the throw for a possible play on the batter-

runner. Should the runner who occupied first base make a long turn at second base, the second baseman is again in position for a play from the shortstop.

On open fields, the second baseman is often designated to take relays only on balls hit to the left of the right fielder, the center fielder taking relays hit to the right fielder's right, the right fielder taking relays on balls hit to the center fielder's left. The second baseman then covers second base on all hits to right field except those hit past the right fielder's left. In most cases such a hit will be good for at least three bases, so the second baseman must go over far enough toward the first base foul line that he will be in line for the throw to home plate. The first baseman should also advise him where to throw.

Fly Balls Hit in the Infield

If first base is occupied and the first baseman fields a foul or fair fly ball, the second baseman should cover first base. This is also true on a fair hit fly ball with first base unoccupied.

When any bases are occupied and the second baseman fields a fly ball hit in back of him, he should, as soon as he catches the ball, run toward the infield to prevent a runner from making an attempt to advance. This is particularly true with third base occupied.

When the shortstop fields a fly ball, the second baseman covers second base. With second base occupied, he covers third if the shortstop and third baseman go after a fly ball, provided the catcher or pitcher does not cover.

Ground Balls

The second baseman should try to handle any slow or medium-hit ground balls to his left. As soon as he is sure he can make the play, he should call to the first baseman, so that the first baseman will not attempt to field the ball, but will cover first base. The second baseman is in better position to make the play, since his throw to first base will be in the direction in which he is moving.

When the ball is fielded in the home plate area of the diamond, and the first baseman covers, the second baseman backs up the throw to first. He also backs up second base when the shortstop covers on any throws from that area.

POINTS TO REMEMBER

When first base is occupied and second base is open, the second baseman should always start toward second base after the pitched ball passes the batter. He will then be ready should the runner attempt to steal.

When any base is occupied, he should always be alert to back up a possible bad throw, catcher to pitcher, by moving a few steps toward second base as the catcher returns the ball.

When not involved in a play, he should watch the base runner to see he touches all bases.

Long relay throws to third and home should be made on the hop.

On any rundowns between second and third base in which the shortstop starts the runner, the second baseman backs up the shortstop.

When two runners occupy second base because of a rundown, both runners should be touched with the ball. The runner who originally occupied the base is entitled to it. Should the umpire not be sure of the rule, one runner must be called out.

When third base is occupied and the second baseman catches a fly ball hit behind him, he should hustle into the diamond after the catch. The runner might attempt to score.

On double play situations with a left field hitter at bat, the second baseman should move in closer to the base line and toward second base, so that he will not have to leave his position until the ball is hit or until the ball passes the batter. The distance he moves is dependent on his speed and ability to cover the base. Every effort should be made to get the first out on the double play.

CHAPTER 8

PLAY OF THE SHORTSTOP

QUALIFICATIONS

The shortstop should have a good pair of hands, a strong throwing arm, and be quick on his feet. The ability to charge in fast for slow-hit ground balls and move right and left for hard-hit ground balls is the mark of the good man at short. Baseball sense and the talent for anticipating plays are valuable assets, of course, and although size is not a necessity, the taller man has the advantage.

TECHNIQUE OF SHORTSTOP PLAY

Fielding and Throwing for the Force-Out at Second Base

After the shortstop has fielded a ground ball with a double play at second base in order, he will not ordinarily straighten up but will start his throw from the body position in which he fields the ball.

On a ground ball hit directly to him the shortstop, after he catches the ball, may take a short step with his left foot in the direction of his throw. At the same instant he should pull his gloved hand down and away and start a snap overhand or sidearm throw (Fig. 89).

There are occasions when he will have to throw from a squat position using only arm action. In this case he does not take a step but pivots left on the balls of his feet so that his toes are pointing in the direction of his throw.

After he fields a ground ball hit to his left, the shortstop should first pull his gloved hand away from the ball to show it, and then toss underhand to second. This lob should not be a full arm swing, but a wrist and forearm snap (Fig. 90).

Fielding and Throwing for the Force-Out at Second

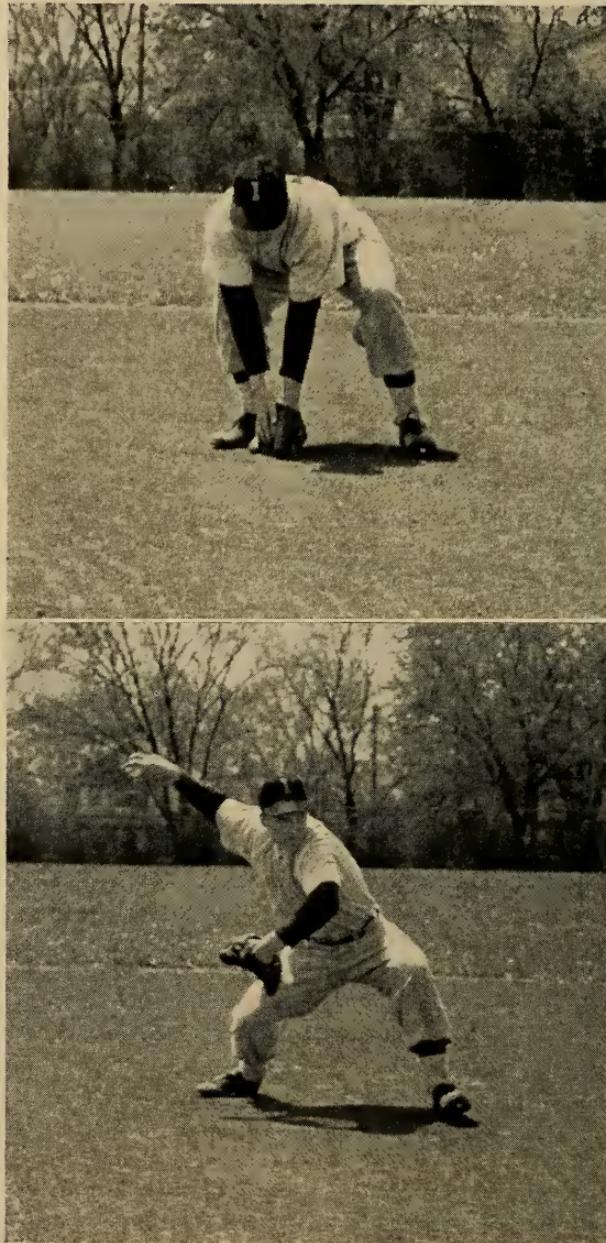


Fig. 89.—On a ball hit directly to him.

On a ball fielded close to the base, the shortstop may lob the ball with both hands. He should open both palms toward the second baseman as he starts the toss. This lob should be executed primarily with the wrists.

Fielding and Throwing for the Force-Out at Second

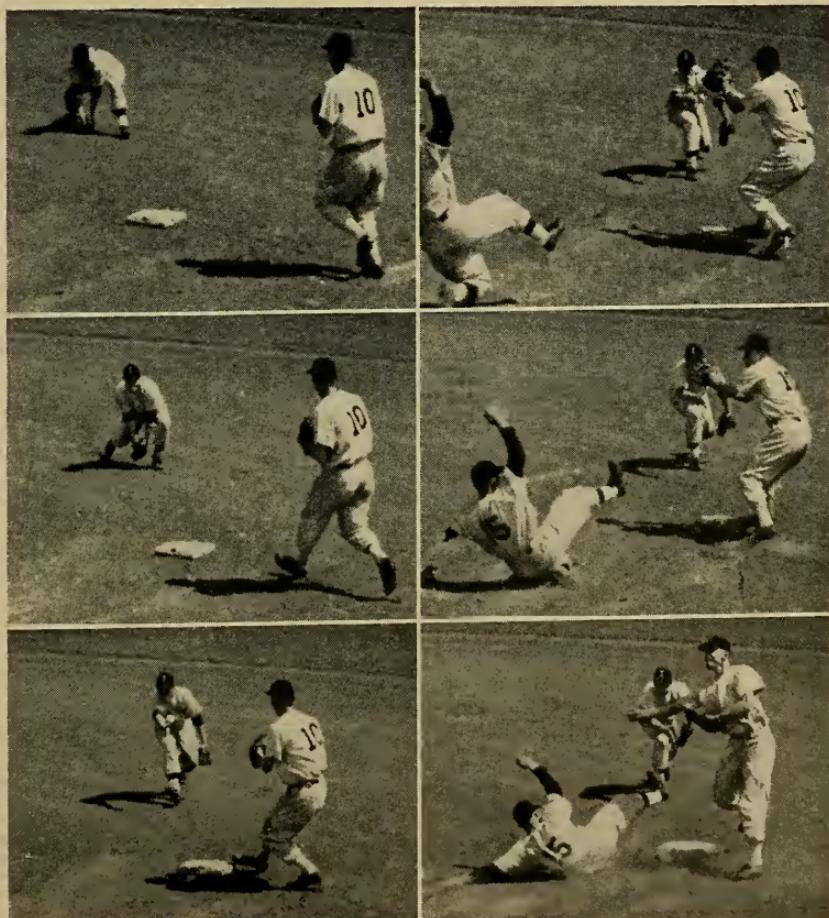


Fig. 90.—On a ball hit to his left.

If the shortstop is only a step or two from the base at the time he catches the ball, he should call, "I've got it," and make the play himself. He should call so that the second baseman will not come into the base and interfere with the play.

Fielding and Throwing for the Force-Out at Second

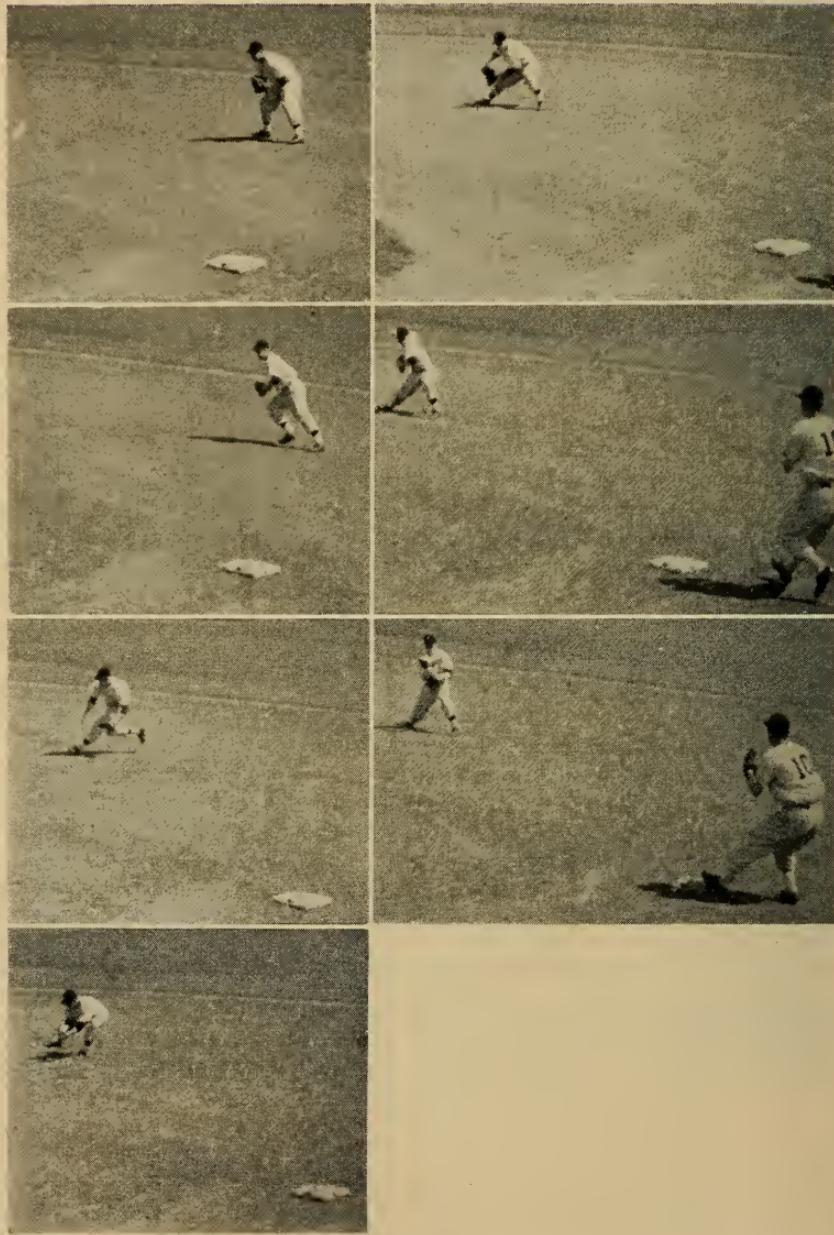


Fig. 91.—On a ball hit to his right.

On a ground ball hit to his right, the shortstop should get into position to field the ball as quickly as possible, the direction depending on the speed of the grounder. He stops squarely in front of it by bracing his right leg and sliding the inside of his right foot in the dirt. (See Ch. 2, Fielding and Throwing.) The throw should start immediately after the ball is fielded. Seldom will the shortstop have time to straighten up. It will usually be either a snap overhand or sidearm, depending on the body position in which the ball is fielded (Fig. 91). If, as he throws, the shortstop takes a step with his left foot, it should be short and in the direction of the throw.

Making the Force-Out and Throwing to First Base

There are several ways in which the shortstop may shift his feet to catch the ball for a force-out and then throw to first base.

If he times his run so that he is just a step away from the base when the ball leaves the second baseman's hand, he steps on the base with his right foot as he catches the ball, then steps out with his left foot for the throw to first. If the runner is close, the step with the left foot should be either to the outfield or infield side of the diamond, away from the runner's line of approach (Fig. 92).

If the runner is close enough to interfere with the shortstop making the throw to first, the shortstop should step on the left field side of second base with his left foot, then step back with his right foot, bracing it for the pivot. The step toward first base with the left foot for the throw should again be away from the runner's line of approach (Fig. 93).

If, as the shortstop comes into the base, the throw is to his left, he should place his right foot on the right field side of second base and step out with his left foot for the catch. He should step behind his left foot with the right, then step toward first base with his left as he makes the throw. These steps will carry the shortstop well away from the runner coming into the base (Fig. 94).

If the throw is to the shortstop's right, he should place his left foot on the third base side of second base and step out with his right to receive the throw. After the catch the shortstop should pivot on his right foot and step into the diamond with his left foot to make the throw.

Making the Force-Out and Throwing to First

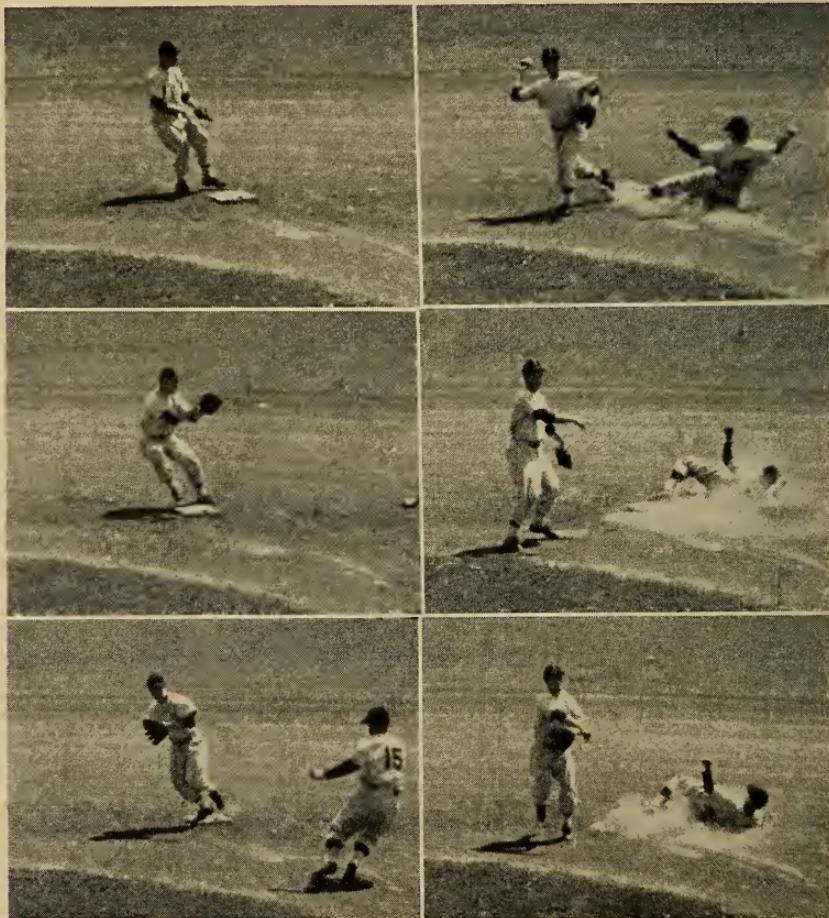


Fig. 92.—Stepping on the base with the right foot.

Another procedure often used is to approach the base on a run, adjusting the stride so that the right foot comes down about four inches from the centerfield corner of the bag. As

Making the Force-Out and Throwing to First

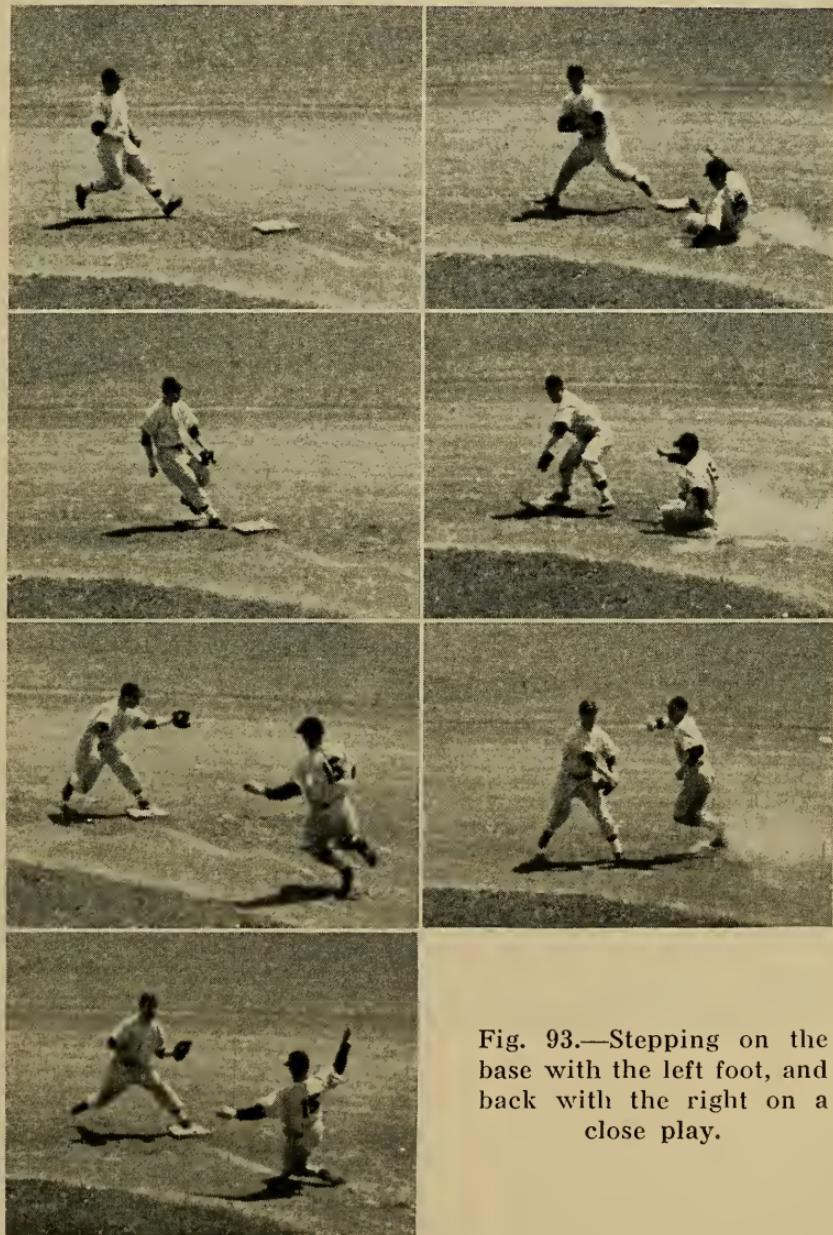


Fig. 93.—Stepping on the base with the left foot, and back with the right on a close play.

the ball is caught and the stride is taken with the left foot to make the throw, the right toe is dragged against the same corner.

Making the Force-Out and Throwing to First

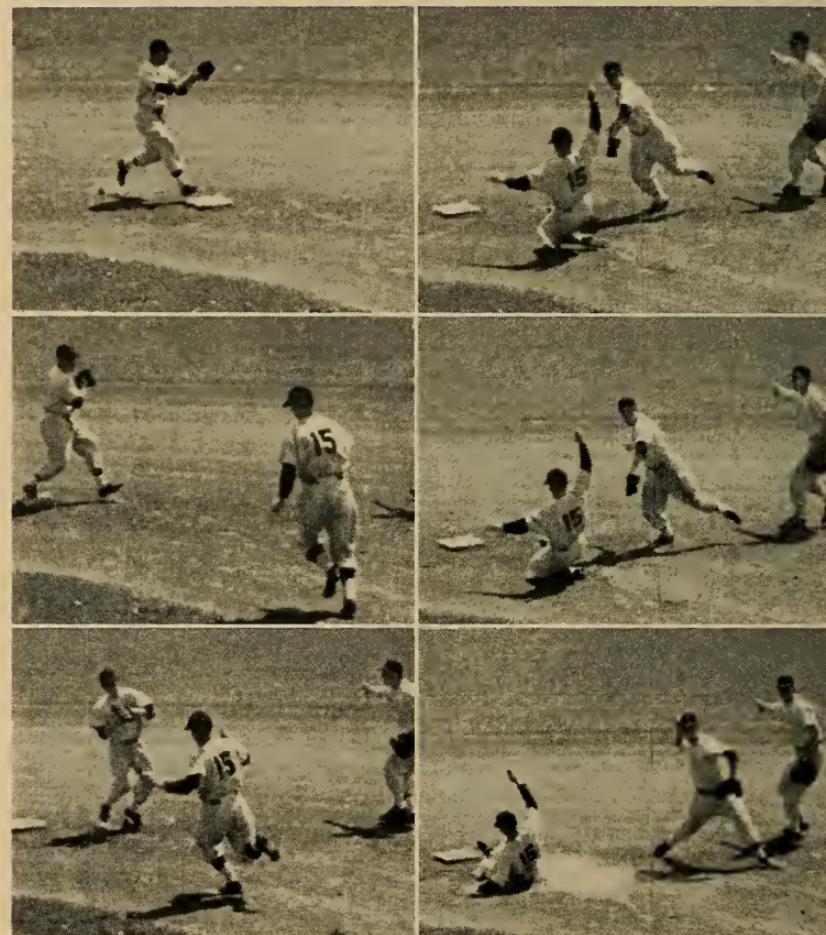


Fig. 94.—The footwork on a throw to the left of the base.

If the runner approaches second base on the infield side of the base line and is close to the base, the shortstop as he catches the ball should place his right foot in the same position with respect to the bag as he runs in. He should then step diagonally forward toward right field with his left foot

Making the Force-Out and Throwing to First

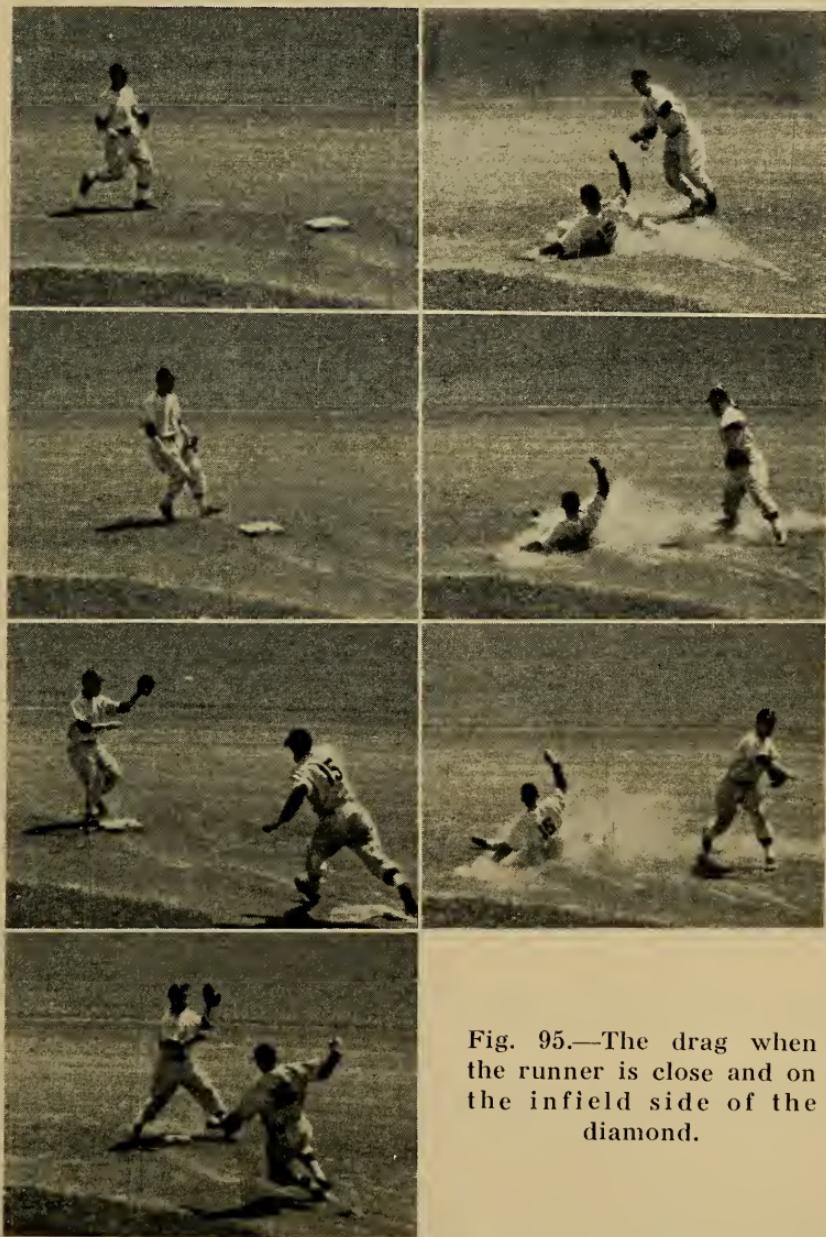


Fig. 95.—The drag when the runner is close and on the infield side of the diamond.

and drag his right toe across the centerfield corner of second base. The right foot is brought behind the left, followed by a step toward first base with the left as the throw is made (Fig. 95). This pattern will take the shortstop out of the path of the runner.

If the runner comes into second base on the outfield side of the diamond, the shortstop places his right foot close to the left field corner of the base, steps toward the infield side of the diamond with his left foot and drags his right against the corner of the bag as he makes the throw.

When the shortstop has time to get set, throws for a force-out from the catcher or pitcher should be to the base and chest high. When the shortstop is moving in as he takes the throw, it should be slightly toward third base. However, he usually takes this throw on the run, and, as he catches the ball, steps on the base. If he steps on the base with his right foot as he makes the catch he should use the base for a pivot and then step out with his left foot as he makes the throw. If he catches the ball and steps on the base with his left foot, he should step toward first base with his right foot followed by a step with his left to make the throw. The step should be away from the path of the base runner when the play is close.

When the Bunt Is Expected

When first base is occupied, and the bunt is expected, the shortstop moves closer to second base so that he can easily cover if there is a play for a force-out at that base. He moves back to his double play position when the count reaches two strikes.

With first and second bases occupied, no one out, and the bunt in order, the shortstop holds the runner close to second base, for a possible force at third. He takes a position not more than two or three steps behind the bag. As the pitcher delivers the ball, the shortstop swings over to cover his normal position if the batter does not drop his bat for a bunt.

With two strikes called on the batter, the shortstop takes his double play position.

The Pick-Off at Second Base

As a part of his regular infield duties, the shortstop may work with either the pitcher or catcher in various pick-off plays (see also Ch. 3, The Pitcher and Pitching).

With the Pitcher.—

1. The shortstop assumes his normal fielding position. As the pitcher takes the set position on the rubber, the shortstop moves in toward the runner two or three steps. The pitcher glances back at the shortstop and, as he does so, the shortstop takes several running steps toward second base and stops, keeping an eye on the runner. If the runner does not lean or step back toward the base, the shortstop continues on toward the bag. As he makes the second start, the pitcher pivots and throws to the base for the play.

The shortstop should make only one fake start, and if he feels he has a play, he should continue on to the base; if not, he should return to his fielding position. If several fakes are made, the pitcher will not know the intent and may pitch to the batter when the shortstop is out of fielding position.

This is known as the jockey pick-off.

2. Shortly before the pitch to the batter, the shortstop makes a fake and returns to his regular fielding position.

Occasionally the base runner will then increase his lead from the base. If the next pitch passes the batter, the shortstop takes a step or two forward. He then gives a signal, prearranged and mutually understood, to the pitcher which the pitcher answers. The pitcher then takes his set position, and as his arms come to rest in front of his body, the shortstop hustles to second base. The pitcher counts three, pivots and throws to second base.

This is the time pick-off.

3. A similar play may be used, as follows: if the shortstop feels he has a play, he holds his normal position until the

pitcher takes the set position. As the pitcher's hands come to rest after the stretch, the shortstop hustles on a direct line to second base. As the pitcher sees the shortstop pass behind the runner, he pivots and throws to the base.

With the Catcher.—

This pick-off play is most effective when a base runner takes a long lead off of second base as the pitch is delivered to the batter. The play may be initiated by a signal from either the shortstop or catcher. A pitch-out is called and as the pitcher starts his delivery, the shortstop hustles to the bag to take the throw. It should also be understood that a throw may be made any time the batter swings and misses, the miss being an automatic signal for a possible play. If a runner takes a long lead, the shortstop should take a step or two toward the base after a miss, alert for a possible play.

Position on Balls Hit to the Outfield

When a single is hit to right field and no one is on base, the shortstop covers second base until the second baseman comes in to cover. The shortstop then backs up the throw to the bag.

On a single to left field, he covers the base if the ball is fielded cleanly. Should the throw in be wide or late, he runs out toward the throw for a cutoff.

When first base is occupied and a single is hit to right field, the shortstop runs forward from his fielding position and takes a cutoff position for any late or wide throw to third base. At the same time he is in back-up position should the throw go to second. On the throw to third, the third baseman should help by calling the play. If it is a cutoff, the shortstop is alert for a play on the batter-runner if he advances to second, or makes a long turn at first.

He may also cover third base on the hit, then hustle out for a cutoff if there is no play at third.

When first base is occupied and a single is hit into left field and fielded cleanly, the shortstop should cover third

base, the third baseman backing up the throw from the outfielder. If the runner advances to third and the throw is wide or late, the shortstop again runs toward the throw, takes it, and holds himself ready for a possible play on the batter-runner. When only second base is occupied the shortstop covers third on a fly ball hit to the outfield, and on a base hit to left field, when the third baseman acts as a cutoff man.

On enclosed fields, the shortstop is usually designated to take all relays on balls hit into left field. As the ball is hit he swings toward the outfielder making the play; if the hit is a single and is fielded cleanly, he immediately returns to second base to cover; if first is occupied he covers third. Again, on late or wide throws he acts as a cutoff man. If the ball passes the outfielder, the shortstop runs toward him, at the same time glancing back to keep track of the progress of any runners. He hustles to a position where he will be in line with the throw from the outfielder and the base to which the throw is to go, close enough so that the relay can be caught on the fly. This is normally a distance of 125 to 150 feet. After the ball is caught, the turn is to the left to make the relay throw.

On open fields many coaches designate the shortstop to take relays only on balls hit past the left fielder's right. In most cases, the relay will go at least to third base. The shortstop should therefore be over far enough toward the third base line to be in line for a throw to third or home and close enough to catch the ball on the fly. On all other balls hit past the left of the left fielder, the shortstop covers third, the outfielders playing the relay. (See Ch. 11, *Play of the Outfielder*.)

Fly Balls

The shortstop covers second base on all fly balls the second baseman attempts to field, and covers third base on all fly balls the third baseman attempts to field. The shortstop should try to field fly balls hit directly behind the third baseman. He is in better position to handle the ball, since he does not have to turn and run backwards.

When any base is occupied and the shortstop fields a fly ball hit in back of him, he should, as soon as he catches the

ball, run toward the infield to prevent the runner from advancing a base. This is particularly true with third base occupied.

Ground Balls

The shortstop should advance as fast as possible toward all ground balls which he attempts to field. This will save time and cut down the length of the throws. Playing a ball too slow is one of the faults of an inexperienced shortstop. With second base occupied and less than two outs, if a ground ball is hit sharply to him or to his right, the shortstop should glance at the runner and fake him back to the base, then make his throw to first. If, as the ball is hit, the runner advances, a play can be made on him at third base. With two outs, the batter-runner is normally played at first.

When second base is occupied and the runner advances on a ground ball which the shortstop fumbles, he should be alert for a possible play on the runner if he makes a long turn at third.

The shortstop covers second base on all ground balls hit on the first base side of second base and in the home plate and pitcher's area, except when he is so shifted that he cannot do so. The second baseman should then be in position to cover.

When first base is occupied and the third baseman fields a slowly-hit ball, the shortstop covers third base, if it is not covered by the catcher or pitcher.

When second base is occupied and the third baseman fields a slowly-hit ball, the shortstop should trail the runner into third base. Should the third baseman fumble, or field the ball too late to make a play at first base, he can fake a throw to that base in an endeavor to lure the runner going to third into making a long turn. He can turn quickly to his left and make a throw to the shortstop for a possible play.

POINTS TO REMEMBER

When bases are occupied, the shortstop should swing over to back up throws from the catcher or pitcher to the second

baseman; from the catcher to the pitcher after a pitch has been delivered; from the catcher to the third baseman on run-downs or pick-offs.

When he takes a relay from the outfield he should listen for instructions from the second baseman or third baseman on where to make the throw.

When not involved in a play, he should watch the base runner to see that all bases are touched.

He should always call for a medium-hit ground ball to his right as soon as he sees he can make a play. This will prevent the possibility of the third baseman deflecting the ball.

CHAPTER 9

THE KEYSTONE COMBINATION

Baseball has contributed much to the language of America, and one phrase that seems certain of sticking goes like this: Tinker, to Evers, to Chance. By themselves, the names mean little to today's ordinary fan; together, they still stand for great baseball.

Tinker, to Evers, to Chance, of course, refers to the most famous of all double-play combinations; and perhaps it's only right that it should be difficult to think of one without thinking of the other two at the same time, because, more than for great individual ballplayers, the names stand for flawless cooperation and teamwork. And while few baseball teams will have infielders even approaching the skill of the famous three, much of the defensive strength of most teams can be measured in the effectiveness of short-to-second-to-first.

The first two of these, the shortstop and second baseman, make up the keystone combination. Together they carry most of the load in the standard infield doubleplay situation, since the first baseman's chief job is simply to receive the ball at the end of the play. The second baseman and shortstop have duties far beyond handling the double play, however. The following material deals with good defensive practice for the keystone combination in various play situations.

PLAY SITUATIONS

Since the double play, starting at second base, is one of the more important plays in which the shortstop and second baseman work together, they should continually practice this play

so that each will know the habits and abilities of the other; the type of ball each throws, whether heavy or light; the speed and accuracy with which each makes the throw to start the play; the speed with which each covers the base as he receives the throw. These are all important.

With First Base Occupied

The player with the greater experience should be designated to give a signal before each pitch, if necessary, so that there will be no misunderstanding as to who is to cover the base if the runner advances. When the batter is definitely known as a right field hitter, whether he is a pull left-handed or late right-handed batter, the shortstop usually covers second base, on an attempted steal; on all bunted or batted balls that are fielded in the home plate area of the diamond; on all hard bunted or batted balls which the pitcher fields, and on any throws coming from the first base side of second base.

When the batter is known as a left field hitter, the second baseman usually covers the base except when the defense plays for a bunt. In that case the second baseman should shift toward first base until two strikes are called on the batter, since the second baseman's first job is to cover first if the first baseman has to field the bunt.

When the hitter is not known, or is a straight-away hitter, a signal should always be given before each pitch so that the base always will be covered. The player giving the signal must therefore watch each signal given by the catcher so that he will know what type of pitch is called for. For right-handed hitters, the shortstop normally would cover on outside pitches, and the second baseman on inside pitches, while for left-handed hitters the second baseman normally covers on outside pitches, and the shortstop on inside pitches.

The player giving the signal must also consider his own pitcher, as well as the hitter. A pitcher with a good fast ball will often cause the batter to swing late, while a pitcher using slow breaking pitches often will cause batters to pull the ball more. When playing according to the type of batter, the signal should occasionally be given as a check.

When a pitch-out is called, whoever is designated to cover the base can leave his position with the pitch; the other player backs up the throw to the base.

The signal can be given by sign or voice. Some sample signals follow. Assume the second baseman gives the signal.

1. When he calls an even number, he himself covers the base; when odd, the shortstop covers.
2. When he calls "Heads up," the shortstop covers, and if no call, he himself covers.
3. When he places his bare hand on his belt, the shortstop covers; otherwise he himself covers.
4. When he closes his bare hand as he takes his stance before the pitch, the shortstop covers; when his hand is open, he himself covers.
5. In one of the most commonly used signals, the second baseman turns his head facing the shortstop, placing the glove against the left side of his face so that none of the opposition can see his mouth. When the shortstop is to cover, the second baseman keeps his mouth closed; when he himself covers, he partially opens his mouth.

When the shortstop is designated to give the signal, the same signs or voice signals can be used. If he uses the glove against the face, he places it against the right side of his face, turns his head left facing the second baseman, and gives the signal.

Tagging the Runner on an Attempted Steal

If the player designated to cover can reach second base before the throw, he assumes one of two positions.

1. He straddles the base, facing toward first. If the throw is accurate and he catches the ball, he continues with a single motion and places the ball in front of the first base side of second base, allowing the runner to slide into the ball. If the throw is wide to the third base side, he should leave the base, catch the ball, then dive for the first base side of the bag.

If the throw is wide to the first base side, he should leave the base, catch the ball, wheel to the left, and try to tag the runner as he goes by.

2. He takes a position in front of the base facing the catcher. If the throw is accurate and the catch is made, he turns left, steps across the base with his left foot, faces the runner and holds the ball so that the runner will slide into it. Throws to either side are played the same as from the straddle position.

Force-Out at Second Base, No Double Play

When either the shortstop or second baseman receives the throw at second base for a force-out ending the inning, he should contact with either foot the side of the base nearest the throw and then step toward the throw with the other foot. If the throw is wide to the player's right, the left foot should be placed on the right side of the base, the right foot stepping out as he reaches for the ball. If the throw is wide to the player's left the right foot is placed on the left side of the base, and the left foot steps out. The same footwork should be used when a double play cannot be completed because of a wide throw. Always be sure to get the first out.

When Second Base Is Occupied

The second baseman and shortstop work together on pick-off plays, the shortstop initiating the play. The shortstop takes two or three steps forward, then takes several running steps toward second base and stops. As the shortstop does this, the second baseman takes several slow steps toward second base, watching both the shortstop and runner. The shortstop starts back to his fielding position, and as he does the runner will often lean or step toward third base. The second baseman must be alert and as he sees the runner lean or step toward third base, the second baseman breaks to the base for a play. The pitcher glances at the shortstop until he is sure the shortstop is not going through with the play himself, then glances at the second baseman. When the second baseman breaks for the base, the pitcher pivots and throws to a

spot slightly toward the first base side of the base, since the momentum of the second baseman after catching the ball will carry him to the third base side for the tag. To perfect timing, this play must be frequently practiced.

Another effective pick-off can be executed in the following manner: The shortstop runs to the base at medium speed, the second baseman taking several slow steps toward the base at the same time. The runner will naturally move back toward the bag. The shortstop returns to his fielding position at an increased speed, passing in front of the runner, attempting to draw him a step or two away from the base. As the runner does this, the second baseman breaks for the base. The pitcher glances at the shortstop and at the instant he is in front of the runner, the pitcher pivots and throws to the second baseman covering.

A pitchout is usually called on the pick-off throws from the catcher. In this case, the player giving the signal, or answering the catcher's signal, covers the base, while the other player backs up the play. Since the pitchout is called, both players can leave their fielding positions as the pitch is delivered. Pick-offs should ordinarily not be played when runs ahead unless the players feel sure they can make the out. Play the batter. (Also see Ch. 3, The Pitcher and Pitching, and Ch. 8, Play of the Shortstop.)

When First and Third Bases Are Occupied

When a double steal is attempted, the defense can be played in two ways. When the players involved do not throw especially well, the man designated runs to a position approximately 25 feet in front of the bag and in line with the throw from the catcher; the other player covers the base. If the second baseman is to take the cutoff, he is facing the runner on third base and is in good position to see if he attempts to score on the throw. He takes the cutoff if the runner breaks. If the runner does not break, the second baseman permits the ball to go through to the base unless advised by the shortstop to cut it off. This the shortstop should do if the throw is either too late or too wide for a play.

When the shortstop takes the cutoff position, the second baseman advises him to "cut it off" or let it go, since the shortstop is not facing the runner on third base as he runs in to the cutoff position, and cannot watch him.

When the players involved have strong throwing arms, the player designated to cover the base does so, while the other backs up the throw from the catcher. Should the runner on third base break for home plate, the player covering the base runs toward the throw, catches it, and plays the runner. If the runner on third base does not break, the runner from first base should be played.

Again, if the shortstop covers the base, the second baseman should help him by calling, "There he goes."

Whenever the defensive team is runs ahead, the play should be made on the runner advancing from first to second base. If the runner on third base can score the winning run, he should be played if he attempts to score. If his is the tying run, the sure out usually should be played whether it be at home plate or second base.

CHAPTER 10

PLAY OF THE THIRD BASEMAN

QUALIFICATIONS

The third baseman should possess a strong, accurate throwing arm and have the ability to throw from any position in which he fields the ball. He must be able to charge in fast on slowly-hit ground balls and bunts, many of which are placed along the third base line. Because of this, a sure pair of hands and the ability to handle the ball with speed are valuable assets. Since his fielding position often brings him close to the batter, hard-hit balls sometimes cannot be fielded cleanly. He must therefore be able to block such batted balls, and have the agility to retrieve them in time to throw out the batter-runner. Size is not so important, though a tall player with the necessary qualifications has some advantage.

TECHNIQUE OF THIRD BASE PLAY

From the defensive standpoint the third baseman's position probably is more mobile than that of any other infielder. Mental alertness to each possible play situation helps make a good third baseman. When the bases are unoccupied, less than two outs and the score close, he must be alert for a possible bunt for a base hit. He therefore plays in closer than his normal position until two strikes are called on the batter. This close position will be anywhere from five feet ahead of the baseline between second and third bases to five feet behind the baseline, depending on the type and speed of the batter.

When the Sacrifice Bunt Is Expected

With first base occupied and the bunt in order, the third baseman assumes the close position. He watches the batter

closely; if he shifts into position to bunt, the third baseman starts toward home plate. When the ball is bunted and another player fields the ball, the third baseman hurries back to third base to cover should the runner attempt to go from first to third base on the bunt.

The Force-Out at Third Base

With first and second bases occupied, none out, score close and a bunt expected, the third baseman assumes a position not more than a step or two from third base. The pitcher covers the third base side of the diamond and attempts to field any ball bunted in that area, the third baseman covering the base for a possible force-out. In this situation, the third baseman must be alert to field a ball bunted so hard that the pitcher cannot handle it. When this occurs he should field the ball and make his throw to first base for the batter-runner. Should the batter attempt to hit, the third baseman breaks several steps to the left of his base, prepared to field a ground ball in his area.

In the case of a hitter definitely known to be weak, third base may be covered by an outfielder—the one who can best play the position. The third baseman then takes a position approximately sixty feet from the batter and ten feet inside the third base line. As the batter drops his bat to bunt, the third baseman rushes toward home plate. If he fields the bunt, he should listen to the catcher for instructions whether to throw to third base for the force-out, or make the play to first base for the batter-runner. If the batter does not shift to bunt but attempts to hit, the third baseman should back away from the batter as fast as possible, getting into better fielding position.

The Pick-Off at Third Base

When third base is occupied, the third baseman should have an understanding with the catcher that if the batter swings at the ball and misses, it is an automatic signal for a possible throw for a pick-off, since the runner often takes an extra step toward home plate as he sees the swing. The

third baseman holds his position until the ball passes the batter, then takes several quick steps toward the base, alert for a throw. If there is no play he returns to his defensive position.

The third baseman and catcher also should have a pick-off signal for a runner who takes a long lead. The signal must always be answered by the player to whom it is given. A pitchout is called, and the third baseman leaves his fielding position to cover as the pitcher delivers the ball.

Taking Throws From the Catcher

A runner leading off of third base normally is in foul territory, therefore, so that when the catcher makes a throw for a pick-off it should be to the second base side of third base. There will then be little danger of hitting the runner, if the throw is at all accurate. As the third baseman catches the ball, he should step across the base with his right foot, facing the runner as he makes the tag. If the throw is wide the third baseman catches the ball and, if he has a play, dives for the home plate side of third base.

When second base is occupied, and third base is open, the third baseman should always take a step or two toward third base after the ball passes the batter, at the same time glancing at the runner. If he forms this habit, he will always be in position to cover should the runner attempt to steal.

When the runner attempts to steal third base the third baseman should place himself on the corner of the base closest to the pitcher to take the throw from the catcher. This leaves the base open for the runner and avoids the possibility of the runner interfering with the third baseman. As the third baseman catches the ball, he makes the tag by turning left and placing his left foot on the left field side of the base, facing the runner (Fig. 96). If the throw is wide, he is in good position to go to either side to make the catch. If he must leave the base to catch the ball, he does so; if he still has a play, he dives for the second base side of third base.

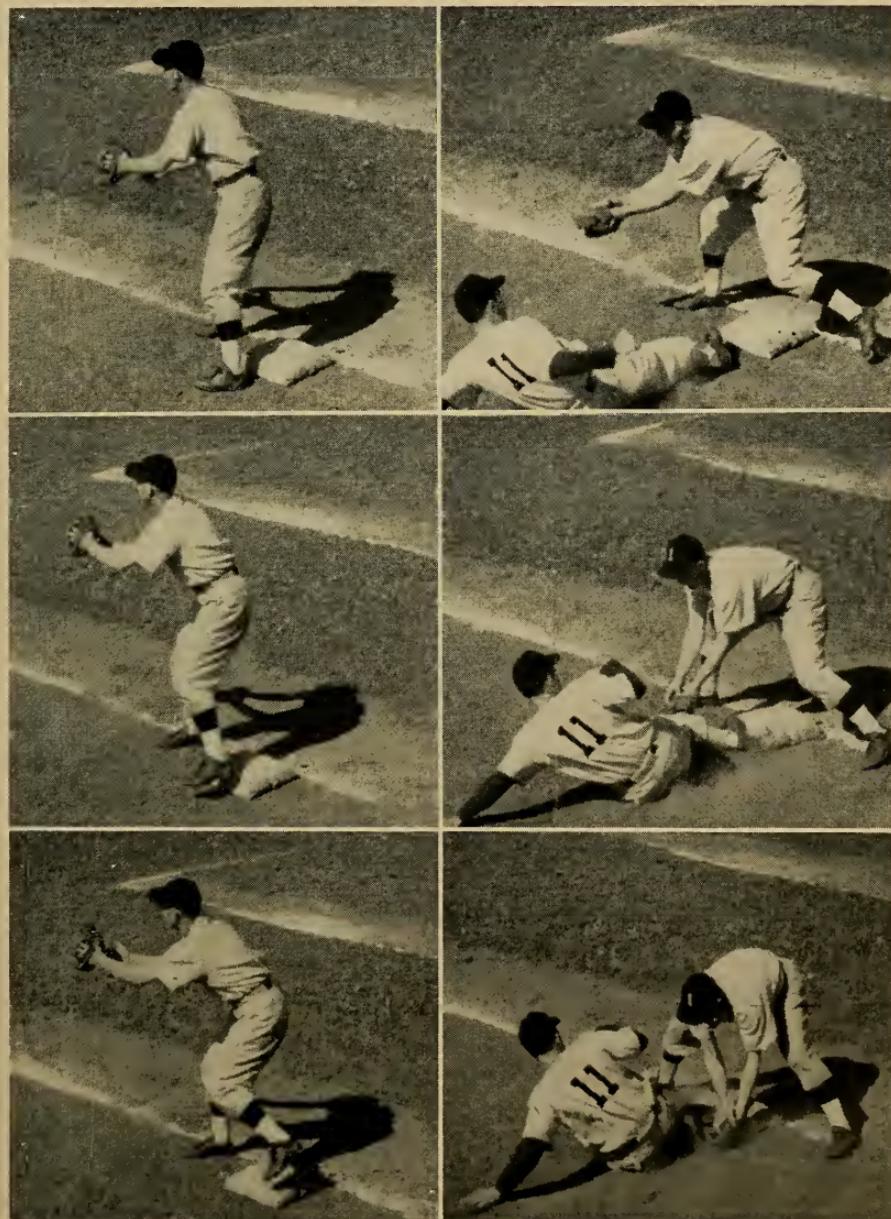


Fig. 96.—Taking a throw from the catcher and tagging a runner coming into third from second.

When second base is occupied, the third baseman must be alert to the possibility of the batter faking a bunt to draw him in on an attempted steal.

Base Hits to the Outfield

When first base is occupied and a base hit goes to left field, the third baseman covers the base until the shortstop comes over to cover. He then backs up the shortstop. Should the runner continue on to third base and the shortstop not cover, on a wide or late throw, the third baseman should run out to a cutoff position, catch the ball and be ready for a play on the batter-runner at second or first base.

If, on a base hit to right field, the base runner continues on to third base, the third baseman covers the bag and gives instructions to the shortstop to take the cutoff if the throw is wide or late. When the shortstop is designated to cover, the third baseman backs him up. If the throw is wide or late the shortstop runs out toward the throw for a cutoff, and the third baseman goes from his back-up position to cover. He instructs the shortstop if there is a play on the batter-runner at second base, or at first base if the batter-runner makes a long turn.

When second base is occupied and a fly ball is caught in the outfield, the shortstop covers third base with the third baseman backing up the play. He should be back forty or fifty feet and in line with the throw, so that if the ball gets away from the shortstop the third baseman is in good position to recover it.

When the third baseman is designated as cutoff man on a base hit into left field and there is a possible play for the runner at home plate, the third baseman places himself approximately sixty feet from the plate, and in line with the throw from the outfielder. If the throw is wide or late, the catcher instructs the third baseman to cut off the throw. He then should be alert for a play on the batter-runner if he continues on to second base, or if he makes a long turn at first base.

Fly Balls Hit to the Infield

If the bases are unoccupied or there is a runner on first, and a fly ball is hit in back of second base which both the shortstop and second baseman go back for, the third baseman should cover second base, unless someone else does so. If he covers, he should call to the catcher to come up and take over third.

He covers third when second base is occupied and any fly ball is hit which he himself does not attempt to field. He does the same with third base occupied except when the catcher fields a fly ball and the pitcher or first baseman does not cover home. In that case, the third baseman covers home, and the shortstop covers third base.

Fielding Ground Balls

The third baseman advances as fast as possible on all slowly-hit and bunted balls which he attempts to field. He fields the ball in front of his right foot and usually does not have time to straighten up as he makes his throw. The ball should be fielded with both hands whenever possible, though occasionally the play can only be made in time by fielding the ball with the bare hand. Normally, the ball is picked up on the outside of the right foot, the throw to first base usually being underhand.

If the ball is bunted or hit slowly close to the third base line and is foul, it should be touched or fielded immediately; it may roll fair. If it is fair, and the batter-runner cannot be thrown out, the ball should be permitted to roll; it may roll foul. However, if a base is occupied, the third baseman must be alert and pick up the ball if there is a possibility that the base runner will advance an extra base.

The third baseman should attempt to field all slowly-hit ground balls that go to the pitcher's right which the pitcher cannot field. He should attempt to field all ground balls to his own left which he can reach. He is in better position to make the play than is the shortstop, since the shortstop sometimes is unable to advance fast enough to field a slow

or medium-hit ball in time. If, however, the shortstop can make the play, he should call it. This will eliminate the possibility of the third baseman deflecting the ball.

Because of the possibilities of bunts and slow-hit ground balls, the third baseman's fielding position is closer to the batter than that of any other infielder. Consequently when a ground ball is hit hard and directly at him, he cannot always play the hop. When the ball cannot be fielded cleanly, he should try to block it, in front of him, dropping to either or both knees if necessary. He will then often have time to pick it up, and throw out the batter-runner.

If he cannot get in front of a hard-hit ground ball to his left or right, he should dive for it and attempt to block it.

If first base is occupied, and the third baseman fields a ground ball hit to his left, the throw should be to second base, provided he has ample time to make the play. This is, of course, a shorter throw than one to first base.

When second base is occupied and there are less than two outs, the third baseman should fake a throw to second base after he fields a hard-hit ground ball, forcing the runner to stay close to the bag. He should do the same to a runner occupying third base. He will still have time to throw out the batter-runner, the fake holding the runner close to the bag so that he cannot advance on the throw to first.

When first and third bases are occupied, no outs, score close, and the ball is hit hard to the third baseman, he takes a quick look at the runner on third base. If the runner does not break when the ball is hit, the third baseman makes his play to second base. With one out, the play goes to second for the double play, second to first. With runs ahead and less than two outs, he should always go for the double play, second to first.

With second and third bases occupied, one out, score close, most teams will attempt to have both runners advance on a hard-hit ground ball to the third baseman. The play should be to the catcher. With no outs, some teams will not attempt to advance unless the ball is hit slowly or to either side of

the third baseman. The third baseman must then decide whether he has a play at home plate.

When he has such a play he should throw the ball to the catcher as quickly as possible, then run over to the base line for a possible rundown, should the runner stop and attempt to return to third base. If the runner from second base has advanced to third and the runner on the rundown returns to third base, the runner from second should be tagged. The runner who first occupied the base is entitled to it. To avoid any misunderstanding, however, both runners should be tagged. One will then have to be called out.

POINTS TO REMEMBER

When any base is occupied, the third baseman backs up throws from the first baseman to the pitcher.

Regardless of the outs, with runs ahead and no one on base the third baseman plays his normal fielding position, shifting according to the batter.

With second base occupied in the latter part of the game, no outs, score even, and a good bunter at bat, the opposition may attempt to bunt the runner to third base. The third baseman should then inform the pitcher that he will cover third base and the pitcher should attempt to field any bunted ball to his right for a possible play at third base. Should the pitcher do so, the third baseman calls the play, either third or first.

If the third baseman has any other possible play than a throw to first base after he fields a slow-hit ball, he should listen for instructions from the catcher.

CHAPTER 11

PLAY OF THE OUTFIELDER

QUALIFICATIONS

The mark of a good outfielder is hustle. He should be able to judge and field all types of fly balls, particularly those which require him to turn and run back to make the catch—long fly balls and line drives hit directly over his head. A good outfielder fields ground balls quickly and accurately. He anticipates possible plays and always throws to the right base. He is alert to back up all batted and thrown balls that come in his general direction. Speed afoot and a good throwing arm are essential, of course, and, finally, in terms of offense, he should be a good hitter.

CHOOSING THE OUTFIELDERS

The Center Fielder

Normally, a team's best outfielder should be placed in center field, which means that he is also the most experienced in most cases. Over a season's play, he will have more plays to make than either of the other outfielders. He must have a good throwing arm and be fast on his feet. Either a right-handed or left-handed thrower is satisfactory, provided he has the other qualifications.

The Right Fielder

When the score is close, the right fielder may be called upon to make several difficult throws.

1. With first base occupied, handling a base hit to his left requires a long and accurate throw to third base, to prevent the base runner from advancing two bases.

2. With second base occupied, a long fly ball to his left which he catches requires a long and accurate throw to third base to prevent the runner from advancing after the catch.

3. With second base occupied, a base hit to his left may require a long and accurate throw to home plate to prevent the runner from scoring.

4. With third base occupied, a fly ball to his left which he catches requires an accurate throw to home plate to prevent the runner from scoring.

For these reasons, if an outfielder throws left-handed, he should be placed in right field if not assigned to center. He is in better position to make the required difficult throws on balls fielded to his left.

The Left Fielder

The left fielder has his most difficult plays to make on balls hit to his right; consequently, if an outfielder is a strong right-handed thrower, he should be placed in this field. After a base hit to his right, his throw must be long and accurate to keep a runner on second base from scoring; if this play cannot be made, the throw to second base must be quick and accurate to prevent the batter-runner from advancing to second base. With third base occupied, a fly ball which he catches to his right requires a similar throw to home plate to prevent the runner from scoring. On these plays the right-hander is in better position to make the throws after the ball is fielded.

POSITION PLAY

According to the Batter

All outfielders should watch the opposing team in batting practice and make some analysis of each batter: long ball hitters, weak hitters, pull, late, or straight-away hitters. A player who hits long drives and fly balls is a long ball hitter and the outfielder should play him deep, while a batter who does not have much strength or power obviously should be played shallow. A right-handed batter who consistently hits the ball into left field is a pull hitter, while a left-handed hitter

who consistently hits into left field is a late hitter. In this case the left fielder moves closer to the left field foul line and, if the batter is also a long ball hitter, deeper than normal. The center fielder moves toward left field and deeper than normal; while the right fielder moves in and over toward center field.

A left-handed hitter who consistently hits the ball into right field is a pull hitter, while a right-handed hitter hitting consistently into this field is a late hitter. The outfielders in this case shift toward right field, the right fielder playing closer to the right field foul line and deeper if the batter is also a long ball hitter. The center fielder moves toward right field and deeper than normal, while the left fielder moves in and over toward center field.

A straight-away hitter is one who usually does not pull a ball or hit late; the outfielders should divide their territory evenly between the foul lines and play deep or shallow according to the batter's power.

According to the Pitcher

Each outfielder should know the ability of each of his team's pitchers. If the pitcher has a good fast ball, a pull hitter will often swing late and, consequently, will not pull the ball as he normally would; the outfielder therefore should not shift as much. If the pitcher has good control, he should pitch away from this type of batter, so he cannot pull the ball. If the batter is a late hitter, the pitcher should pitch inside, to the batter's weakness. As the batter comes to the plate, the outfielders, knowing where the pitcher will pitch, should shift their positions.

Experienced outfielders can often get a quicker start when the ball is hit if they know what the pitch will be, and where it will be thrown. Either the shortstop or second baseman can inform the outfield of the pitch by giving a signal with his bare hand. For example, as he sees the catcher's signal, he can place the bare hand belt-high behind and against his back. If the pitch called for is a fast ball high and inside, the fist is closed and placed just above the belt; if low and outside, just below the belt. If a curve ball is called, the

hand is opened. If a change of pace is called, the fingers are wiggled. Obviously, this system can be used effectively only when a pitcher has good control.

According to the Infield

If the infield moves in for a play at home plate in the last inning, the outfield moves in. With the tying or winning run on third base, a long-hit fly ball, even though caught, will score the runner. By playing in, the chances of a ball dropping in front of the outfielder will be lessened, and if he catches the ball he has a good chance to throw out the runner attempting to score.

According to the Score

If a long foul fly ball is hit in the last inning, with less than two outs, and the winning run is on third base, the left or right fielder should not attempt to catch the ball, since the runner could easily score.

If the defensive team is runs ahead, and the game is being played in an open field, the outfielders should play deep, to help eliminate the possibility of a ball being hit for extra bases.

According to the Wind

The outfielder should know the direction of the wind, and play his position so that he can take advantage of it whether blowing in toward the batter, out toward the outfield, or across the diamond. A cross-wind causes a fly ball to drift and a line drive to curve. (See Ch. 2, Fielding and Throwing.)

THE OUTFIELDER'S TECHNIQUE

Fielding

When any base is occupied, the outfielder should try to field a ground ball or fly ball on his throwing side, so that he can make his throw to the infield as quickly as possible.

An outfielder should devote most of his practice to going back for line drives, and long fly balls; those are the most

difficult to catch, and if not caught result in extra base hits. He should come in fast on all ground balls hit to him, since he will often be called upon to field such a ball and make a quick throw to a base. Constant practice will make these plays easier for him.

A fly ball is often hit so that either the center fielder or left fielder, or the center fielder or right fielder, can catch the ball. As soon as an outfielder is sure he can make the catch, he should call, "I've got it." The call should be clear and loud and repeated several times. The outfielder calling first has the right of way, even though the other might be in better position to make the play.

If two outfielders call for the ball at the same time, the center fielder has the right of way. If a short fly ball is hit and an outfielder and infielder are both attempting to catch the ball, the player calling first has the right of way. If they both call at the same time, or neither calls, the outfielder has the right of way, since he has the play in front of him and is in better position to make a play after the ball is caught.

There are situations when an outfielder must not call for the ball too soon.

1. If the wind is blowing in toward the infield, a short fly ball that the outfielder could normally catch will not carry as far; consequently, he should hold up his call until he is sure he can make the catch more easily than the infielder.

2. With a cross-wind, a fly ball may be hit between two outfielders. The outfielder running into the wind should, if he can, make the catch, since the ball will drift toward him.

3. If the left fielder has a better throwing arm than the center fielder and the ball is hit between the two with a base runner threatening to advance, the left fielder should make the catch if he can get into good throwing position.

Most baseball fields are constructed so that the sun is at a batter's back. Consequently, on certain fly balls one and sometimes two outfielders will face the sun, during the course of a game played in daytime. Unless an outfielder has had experience playing the sun field, he is liable to find it rough

for a time. If the coach has a choice, he normally should put an experienced player in that position.

When a ball is hit into the glare of the sun, and the outfielder has time to get set under the ball, he should shade his eyes with his hand, even though he is wearing sun glasses. If the sun is to his left, he should shade his eyes with his left hand, turning his body slightly to the right, blocking out the direct glare as much as possible. The hand should be well above the eyes. If the sun is to his right, he should shade his eyes with his right hand, turning his body slightly to the left. If the sun is directly in front and above him the gloved hand should be used as a shade. Should the ball be hit directly into the sun's glare and be lost to view, a quick glance away will often adjust the sight so that the ball can be located as the outfielder looks back.

(Other material regarding fielding will be found in Ch. 2.)

Backing Up Plays

Except when they handle the ball directly, outfielders should back up all batted and thrown balls that go in their general direction in case of an error or wild throw.

The right fielder backs up the following:

1. First base on all throws from the catcher, pitcher, third baseman, and shortstop.
2. First base on rundowns between first and second bases.
3. Second base on all throws from the third baseman and shortstop; also those from the left fielder after he fields a ball hit to his right, followed by a throw to second.
4. Second base on rundowns between second and third bases.
5. Batted balls which the first baseman or second baseman field or attempt to field.
6. Batted balls hit to the left of the center fielder which he fields or attempts to field.

The center fielder backs up the following:

1. Second base on all throws from the catcher, pitcher, third baseman or first baseman, if he is in position to do so.

2. Second base on rundowns between first and second base, and second and third base.
3. Batted balls hit through the center of the diamond.
4. Batted balls hit to the right of the right fielder which he fields or attempts to field, and those hit to the left of the left fielder, which he fields or attempts to field.

The left fielder backs up the following:

1. Second base on all throws from the first baseman, second baseman, and right fielder.
2. Third base on all throws from the catcher, pitcher, first baseman, second baseman; also from the right fielder on balls which he fields to his left.
3. Third base on rundowns between second and third base and rundowns between third base and home plate.
4. Batted balls which the third baseman or shortstop fields, or attempts to field.
5. Batted balls to the right of the center fielder which he fields, or attempts to field.

All outfielders should know pick-off signals so that if a throw is made in their direction they are alert to back up the throw.

When a game is played in an open park and a ball is hit between or over any of the outfielders, the outfielder closest to the ball calls, "I've got it." The next nearest outfielder places himself in line with third base or home plate, depending on where the throw is to be made and close enough so that the throw will be caught on the fly. He in turn throws the ball on one hop to the base where the play will be made.

If, however, the ball passes to the left of the right fielder, the second baseman goes out for the relay, and if the ball passes to the right of the left fielder, the shortstop goes out for the relay.

When a game is played in a closed park and a ball is hit over or past any outfielder, the nearest two outfielders should converge on the ball. It may carom off the enclosure in either

direction. The outfielder not fielding the ball watches the base runners and directs the player fielding the ball where to throw.

Outfielders of little experience, playing in an enclosed park, often play badly long fly balls that may hit the enclosure. The outfielder should go back to the enclosure and face the fly ball. As soon as he sees he cannot catch it, he should run several steps toward the infield, then turn and face the enclosure far enough away that he can play the rebound. If he is too close, the ball may bounce past him and the base runner will take an extra base.

Throwing to Bases

All throws from the outfield should be overhand, and, unless short, on a line and with a single hop. Short throws should be on a line and on the fly. Throws for relays should reach the relay man chest high; throws to a base that take a hop will usually be low enough for good tagging position.

When the bases are unoccupied and a single is hit to the outfield, the throw goes to second base.

When first base is occupied and a single is hit to the outfield, the throw goes to third base. The exceptions are a hit-and-run or steal-and-hit play, or if the ball is fumbled; then the outfielder must decide whether he has a possible play at third base. If not, the throw goes to second base. This also depends on the speed of the base runner who was on first base and the throwing arm of the outfielder. If a fly ball is caught by an outfielder, the throw goes to second base.

When second base is occupied, the score close, and a single is hit to the outfield, the throw goes to home plate. If there is no play at home plate, the cutoff man, first baseman or third baseman or pitcher, whoever is designated, will play the ball for a possible play on the batter-runner. If the defensive team is several runs ahead, or behind, the throw should go to second base unless the outfielder is sure he can make the play at home plate. If a fly ball is caught, the throw is to third base.

When third base is occupied, the score close, and a single is hit to the outfield, the throw always goes to second base. If a fly ball is caught, the throw normally goes to home plate. On a long fly it goes to second.

When first and second bases are occupied, the score close and a single is hit to the outfield, the throw goes to home plate, provided it is not a long single or hit-and-run play. On a long single or hit-and-run, the throw goes to third base as first choice; if no play there, then to second.

When first and third bases are occupied and a single is hit to the outfield, the throw goes to third base regardless of the score. If there is no play on the runner from first base, it should be cut off and a play made on the batter-runner. If a fly ball is caught, the throw goes to home plate, provided the score is close, and there is a good chance to throw out the runner from third base. If the defensive team is runs ahead, the throw goes to second base.

When second and third bases are occupied and a single is hit to the outfield, the throw goes to home plate for the runner who was on second base. The first baseman, third baseman, or pitcher, whoever is designated, will again cut off the throw if there is no play on the runner who is scoring.

The exception to this play would be in the last inning of the game with the offensive team having two outs and the defensive team three runs ahead; then the play should go to second base to keep the tying run from getting into scoring position.

If a normal fly ball is caught and the score is close, the throw goes to home plate. If the defensive team is runs ahead, the throw may go to third base to prevent the runner on second from advancing a base.

When all the bases are occupied, score close and a normal single is hit to the outfield, the throw goes to home plate, in an endeavor to keep the runner on second base from scoring. If the defensive team is runs ahead, the throw goes to third base to keep the runner on first from attempting to advance to third. On long-hit singles that are not fielded quickly

and require long throws, or on singles hit well to either side of an outfielder, the throw normally goes to second base. However, if the runner on first is slow and there is a good chance to make a play on him as he goes to third, it should be done.

When there is no one on base and a ball is hit for two bases in an enclosed park, the throw should go to third base, whether the ball is relayed or thrown direct. If the ball is hit into right field and this field is long, the ball should be relayed to the second baseman for the throw.

If the ball is hit for two bases anywhere between the center fielder and the left field line on an open field, the throw should be made direct to third base. If the throw requires a relay, the hit will be at least a three base hit, and the relay should be to home plate. If the ball is hit anywhere between the center fielder and the right field line, a relay should be taken. Either an outfielder or the second baseman takes the relay, depending on who has been designated to do so. The throw is either to third base or home plate, depending on the speed of the respective base runners.

Throwing After Fielding Fly Balls

Whenever an outfielder comes in and catches a short fly ball, the runner, or runners, will usually have a lead off the base so they can advance a base in case he drops the ball. Consequently, when the ball is caught, there is not much danger of a runner attempting to advance. The outfielder should then keep on running toward the infield until he has a short throw to make to an infielder. Should a runner be "touched up" and attempt to advance, it is then an easy throw to any base.

When an outfielder catches a long fly ball, the outfielder nearest to him should call the play when runners are on base. The length of the throw and the throwing arm of the outfielder must be considered. A runner on third base should be ignored if there are runners on first and second base, and if they both "tag up," the throw goes to third base if the ball is hit into the left or left center field area. If hit into the right or

right center field area, the throw should usually go to second base. The throw goes to third base only if the fielder throwing has an exceptionally good arm and has a chance for a play. With a runner on first base, the throw goes to second base.

POINTS TO REMEMBER

When runs ahead, the outfielder should always play a ground ball safe; block it if necessary.

He should know when a pitchout or pick-off is called, so that he can make a fast start to back up the play.

He never should give up on a fly ball.

He should know the score, inning, number of outs, strength and weakness of the opposition, and call on the batter. These, along with his ability to throw the ball, are the factors which decide where a play is to be made.

When a base is occupied he should never stand and hold the ball, after the catch, daring the base runner to advance. He should get the ball into the infield as quickly as possible by immediately throwing it, or on short fly balls, by rushing in toward the infield.

With the winning run on third base in the last inning, and less than two outs, a foul fly ball should not be caught unless the outfielder has a good chance to throw out the runner, should he attempt to advance.

CHAPTER 12

DEFENSIVE PLAY AND DRILLS

All infielders should anticipate any possible plays that may arise in a given situation; consequently, they must keep the following factors in mind:

The score.

The inning.

The call on the batter.

The number of outs.

The strength and weakness in throwing, fielding and pitcher's control.

All of these elements affect position play; they are mentioned frequently because of their importance.

Each infielder should plan what he will do if the next pitch is hit to him, including a plan of action if he makes an error. If each player will mentally run through all the possible plays that can occur in a given play situation, he will not make mental misplays.

Normal, or Deep Defense

Depending upon his ability to go to the right or left, the first baseman's normal position is eight to fifteen feet from the foul line, and fifteen to twenty-five feet in back of the line between first and second bases. The hitter's tendency to pull also must be taken into consideration.

The second baseman's normal position is twenty to thirty feet toward first base, and twenty to thirty feet back of the line between first and second bases.

The shortstop's normal position is twenty to thirty feet behind the line between second and third bases, and approximately the same distance off the bag in the direction of third base.

The third baseman's position is ten to twenty feet from the foul line and ten to twenty feet back of the line between second and third bases.

If the batter tends to hit to left field, the entire infield should move right; the third baseman and shortstop moving deeper, the second baseman and first baseman moving closer. If the batter is a right field hitter, the infield should move to the left; the second baseman and first baseman playing deeper, the third baseman and shortstop moving closer. If the hitter is small and fast, the infield moves in, shifting left or right toward the field to which he hits.

Double Play Defense

In double play situations, the same pattern of shifts for each type of hitter should be followed, but the infield plays closer to the batter. The first baseman's position varies from approximately ten feet behind the first-to-second-base line to five feet ahead of that line. If he is holding a runner on first base, he should be on the line or right behind the runner. When he holds a runner on first base, the first baseman should break toward second base as the pitch is delivered.

The second baseman and shortstop move toward the batter a step or two from their normal positions. If they cannot hold these positions until the ball reaches the batter and still cover second base, they should take another step or two toward second. The only exception is when a batter is definitely known as a pull hitter. In this case, the fielder on the side to which the batter hits plays the batter, playing somewhat deeper than for a normal double play.

The third baseman plays from approximately ten feet behind the second-to-third-base line all the way up to the line, depending upon the type of hitter. A strong pull hitter requires a deeper defensive position than a straight-away or light hitter.

Close Defense

On the close defense for plays at home plate, the infield plays from the base lines to a position five to ten feet ahead of the lines and shifts left or right according to the batter.

Bunt Defense

When second base is open and first base is occupied, the first baseman holds the runner on first base.

The second baseman shifts over toward first base, so as to be in position to cover first base, should the first baseman field the bunt.

The shortstop moves closer to second base so as to cover should a play be made there. The third baseman plays in front of the second-to-third-base line, shifting according to the hitter. These positions are held until two strikes are called. The infield then moves to the double play defense.

Defense in Normal Play Situations

When first base is occupied, no one out, score even. With a weak hitter at bat, the infield must be alert for a bunt and position itself accordingly. If a good hitter is at bat, the infield must also be alert for a possible hit-and-run.

One out: regardless of the score. The infield plays for a double play.

Two outs. The infield plays the batter.

With runs ahead. If there are no outs, or only one, the defense plays for a double play; if there are two outs, it plays the batter.

When second base is occupied, no one out, score even. If a weak hitter is at bat, he may bunt. The third baseman and first baseman play in on the base line. For a good hitter, normal position.

One or two outs, regardless of the score. The infield plays the batter.

When first and second bases are occupied, score close, nobody out, and a bunt is expected. The first baseman plays

approximately sixty feet from the batter. If the ball is bunted between the first base line and the pitcher's mound, the first baseman should field it for a possible throw to third base for a force-out. This is his first play. If he cannot make this play, the throw should go to first. Should the batter not drop his bat for a bunt, but attempt to hit, the first baseman must back up fast to cover his territory.

The second baseman shifts into position to cover first base. He takes any throw to first base in this play situation. The shortstop holds the runner on second base close to the bag, and breaks for his normal position with the pitch, in case the batter should hit instead of bunt.

The third baseman plays not more than a step or two away from third base, in position to take a throw to that base for a force-out. He also must be alert for a hard bunt that the pitcher cannot field. He then must field the ball and make his throw to first base. If the batter does not drop his bat for a bunt, but swings instead, the third baseman breaks off of the base to cover his territory.

If the batter signifies his intention of bunting, the pitcher breaks for the third base line to cover immediately after he releases the ball. He should look first for a possible force-out at third base; if this is not possible, the catcher should call the throw to first base.

A less orthodox defense can also be used effectively in this situation. The first baseman, second baseman, and shortstop play the positions indicated above. The third baseman plays about sixty feet from the batter, approximately ten feet from the third base line.

The left fielder comes in to third base, and plays a step or two from the base. The center fielder and right fielder are shifted to balance the outfield. If the batter does not drop his bat for the bunt but attempts to hit, the first baseman backs up fast, the second baseman takes a step or two to his right to cover his position, the shortstop breaks off of second base to cover his position, the third baseman goes diagonally back to his left, while the left fielder backs up from his position at

third base. If the left fielder does not handle the play as well as the man in center, the center fielder may take over third.

This defense can be used if the batter is a definitely known weak hitter. For a good hitter, the normal defense is more logical because of the outfield coverage.

With one out, the defense takes the double play position.

With two outs, the defense plays normal position, shifting for the type of hitter.

With three or more runs behind, the offensive team will usually hit. The same, in general, holds true with three or more runs ahead. With nobody or one out, the defense plays the double play; with two outs, the defense plays normal position, adjusted to the type of hitter. *When second and third bases are occupied, no outs or one out, score even*, the infield plays close for a play at home plate. If the defense is one run ahead in the early part of the game and a good hitter is at bat, the infield may play deep and give the run. With a weak hitter, play halfway in for a possible play at home plate.

When third base is occupied, no outs or one out, score even, the infield plays close. If the defense is one run ahead early in the game, the run may be conceded. In the latter part of the game the defense should play close. If the defense is two or more runs ahead, they should play normal and concede the run.

When all three bases are occupied, no outs and the score close, the infield plays close for the force-out at home plate. If the defense is one run ahead in the early stages of the game, they may give the run and play for the double play, second to first base. If, however, the ball is fielded when hit sharply at the third baseman, pitcher, or first baseman, the play should always be to home plate.

With one out, regardless of the score, the infield plays for the double play second to first.

When first and third bases are occupied, no outs, score even. In the early part of the game, the infield plays for a double play, second to first base. If the ball is hit hard and directly

to the third baseman, or first baseman, or pitcher, the player who fields should look at the runner on third base, faking him back to the base, and then play for the double play, second to first. In the last inning, under these conditions, the infield moves to the close defense. Every effort must be made to stop the runner on third base from scoring.

With one out, score even. The infield plays for the double play, second to first base. With a weak hitter up, the third baseman must be alert for a possible squeeze play by the offensive team; the third baseman and first baseman should play slightly closer than their normal double play position, the first baseman holding the runner on. In the late innings the defense should first attempt to stop the runner from scoring.

With runs ahead, the infield always plays for the double play, second to first.

POINTS TO REMEMBER

The infield should always try to keep the tying or winning run from moving into scoring position.

Each infielder should shift position deeper than normal on a strong hitter into his field; closer than normal on a weak hitter into his field.

He should never make useless throws.

He should always retrieve a fumbled ball as quickly as possible. There may be a chance for a play, and a quick recovery may keep a runner from advancing an extra base.

He should always cover any open base in his area and back up all possible plays in his area if the base is covered.

The infield should play close in the late innings when conceding a run means tying up the game. They may concede the tying run in the early part of a game if it prevents a following run from moving into scoring position.

The infield always plays the defense deeper when runs ahead.

Infielders should know how fast the batter is afoot; fast runners must be played a step or two closer.

All infielders should know their own pitcher, so that they can shift their positions according to his type of pitching.

Between pitches, infielders should smooth out any depression made by spikes in front of their position. The depression may cause a bad hop.

GENERAL DEFENSIVE DRILLS

Defensive play can be studied analytically and diagrammed on a blackboard for weeks—but the player learns best when there's a glove on his hand and an actual play situation around him. The drills which follow have proved effective; obviously, there are also many possible variations.

The team takes its defensive position on the field. Depending upon what he's demonstrating, the coach in each case should call one, several, or all of the following: the score, the inning, the number of outs, the call on the batter, and the batter's strength and weakness. In some cases, a runner or runners should be placed on base. Examples:

A. A runner is placed on first base and the calls are as follows:

1. The score is even, in the seventh inning, with no one out, and less than two strikes, with a poor hitter at bat. This situation would call for a bunt. The defense assumes the bunt defense. If the coach is the fungo hitter, which is the usual procedure, he should have a player ready to run to first base as he bunts the ball. As soon as the defense is set, the ball is bunted to any desired spot and the defensive play is executed.

2. Same situation, but with two strikes on the batter. In this case the double play defense is called for, since the batter ordinarily will not bunt. The coach then hits the ball to any infielder.

3. Same situation, with the defense more than two runs ahead. Again the double play is called for, with less than two outs; with two outs, the defense plays for the batter.

4. A good hitter is at bat with one or two outs. The coach now hits the ball to the left fielder as a sharp single, the runner on first base advancing. The throw should go to third

base, with the shortstop covering the base, and the third baseman backing up the play. The coach then hits a long single to the center fielder and right fielder. In this case, the shortstop places himself in position for a cutoff, should the runner on first base be able to advance to third base. The shortstop then plays the batter-runner from home plate as he makes the long turn at first base, or attempts to advance to second base on the throw-in.

5. The call is one out; the play, the hit-and-run. As the coach tosses the ball in the air to hit it, the runner breaks from first. This will give the runner practically the same start as he would have if a pitcher pitched the ball.

On a long single to right field or right center field, the throw will go to second base, to play the batter-runner.

B. Runners are now placed on first and second bases.

1. The call is score even, no one out, and less than two strikes on the batter; the batter following, a good hitter. The defense for a force-out at third base is indicated. The coach bunts the ball for the play. (With two strikes called, or with one out, the double play defense should be set.) Before hitting or bunting the ball, the coach should always make certain that the defense is properly set, each player in the correct position.

2. The ball is now hit sharply to each outfielder. He should throw the ball to home plate, with the cut off man taking his position for the cutoff.

3. The call is: the defensive team is runs ahead. The ball is hit first as a sharp single, then as a long single. On the sharp single, the outfielders throw to third base, keeping the runner on first from advancing to third. (Concede the run unless outfielder is sure he can throw the runner out.) On the long single, the throw should go to second base, keeping batter-runner from advancing to that base.

C. Runners are placed on first and third bases.

1. The call is no outs, score even, weak hitter, early innings. In this case, the defense sets for the double play. The ball is hit to the desired infielder, and the play is made.

2. The ball is then hit to each outfielder for a sharp single, then for a long single. The runner on third base is ignored, and the runner on first base is played.

D. Runners are now placed on all the bases.

1. The call is no outs, score even, early innings. The shortstop and the second baseman play approximately on the base lines, with the third baseman and first baseman playing close. The ball is hit to either side of the shortstop or second baseman; the play goes to second base for the double play. The ball is then hit hard and directly to either, the play going home, then to first base.

2. The ball is now hit moderately hard to the first baseman's right with the play going to second base, then to first base.

3. The ball is hit moderately hard to the third baseman's left, with the play going to second base, then to first base. Neither will have much chance to get the runner going home, since he starts toward home plate as the ball is hit.

4. The ball is now hit to the third baseman's right, so he fields the ball only a step or two from third base. Unless he is sure he can get the runner at home plate, he should step on third base for the force-out and then throw to first base. (In the late innings, play the runner going home; stop the run.)

5. The ball is hit to the first baseman's left, only a step or two from the base. The first baseman should step on the base, then throw to second base, in which case the shortstop must tag the runner going into second. The first baseman does this unless he is sure he can get the runner going into home plate. If the call is the last part of the game, every effort must be made to get the force-out at home.

6. Sharp singles and long singles are hit to each of the outfielders. On sharp singles, the outfielders should make all throws to home plate to prevent the runner who was on second base from scoring. On long singles, the outfielder must decide whether he can make a play at home on the player who occupied second base. If he cannot, the throw goes to third base to stop the runner who was on first base from advancing.

to third. The shortstop should take the cutoff if there is no possible play on this runner, and will make his play to second base if the batter-runner attempts to advance.

7. The call is one out. The defense is set for the double play. The ball is hit to any infielder, who makes his logical double play.

In all drills involving long hits, the second baseman and shortstop should practice going out for relays from the outfielders. At the same time, if the team will be playing games scheduled in open parks, the outfielders should be drilled on their relays.

Pitcher-Catcher Drills

A. A runner is placed on first base. A batter stands in the batter's box for all drills; first a right-handed batter, then a left-hander. The pitcher delivers the ball to the catcher. The batter swings at the ball if a strike, but intentionally misses it. The runner on first base attempts to steal second base, and the catcher attempts to throw out the runner. (The catcher should wear all of his equipment during the drill, so he becomes used to it.)

The pitcher should work on his move, holding the runner close to first base by occasionally throwing to that base. The coach should watch the shortstop and second baseman to see that they do not leave their positions before the ball has passed the batter. He also watches the catcher, noting his shift to get into position to throw.

During this drill the coach should occasionally advise the runner to start before the pitcher starts his delivery, so that the pitcher will learn to step off of the pitcher's plate in the proper manner, and will also learn to play the runner going from first to second base. The runner should go through, stop, and also go back to first base after his break. If the runner stops, the pitcher runs directly at him, making him declare himself before he makes a throw. The coach should impress upon the pitcher the necessity of driving the batter back to the base from which he came. Occasionally the coach also should

advise the runner to get picked off first base, allowing the first baseman, second baseman, and shortstop to practice run-downs. He checks to see that the play is properly backed up.

B. Runners are placed on first and second bases. The runner on second base leads on a double steal, with the runner on first base following. The catcher throws to third base to get the lead runner. A slow runner is then placed on first base. Now the catcher throws to second base to get the runner going from first base. Unless a catcher has a good arm, he should rarely make this throw, always attempting to get the lead runner instead.

C. Runners are placed on first and third bases. The double steal is executed. The catcher goes through his three choices, of throwing through, faking his throw to second and then throwing to third base, or of throwing to the pitcher for a cutoff.

The coach can at this time decide which defense he will use; whether the shortstop or second baseman is always to cover and then run toward home plate for the cutoff, or, whether he will have one or the other go directly to the cutoff position, and let the ball go through if the runner on third base does not break. His choice of play should depend, for the most part, on the throwing arms of the players involved.

Pick-Off Drills

A. A runner is placed at home plate, and the coach hits a ground ball past the first baseman. As the ball is hit, the batter-runner goes to first base. The first baseman does not hurry back to his base to cover, but stays away from the base to lure the runner into a long turn. The catcher trails the runner to first base. As the runner makes his long turn, the catcher comes in to first base from in back of the first base coach. The right fielder throws the ball to the shortstop, who is covering second base. As soon as the shortstop catches the ball, he immediately throws to the catcher at first base for the pick-off.

B. Runners are placed on first and second bases. The call is one out, the defensive team runs ahead. The defense sets

for a double play. The first baseman plays in back of the runner at first base, who takes a long lead. The first baseman gives the signal to the catcher for a pick-off. The catcher answers the signal and then calls for a pitch-out. As the pitcher delivers the ball, the first baseman cuts behind the runner for the pick-off play.

C. The runner on second base now is instructed to get a long lead. The shortstop signals for a pick-off, and the catcher answers the signal. A pitchout is called and, as the pitcher delivers to the plate, the shortstop cuts behind the runner for the play.

DEFENSIVE DRILLS FOR PITCHERS

Fielding Bunts and Ground Balls

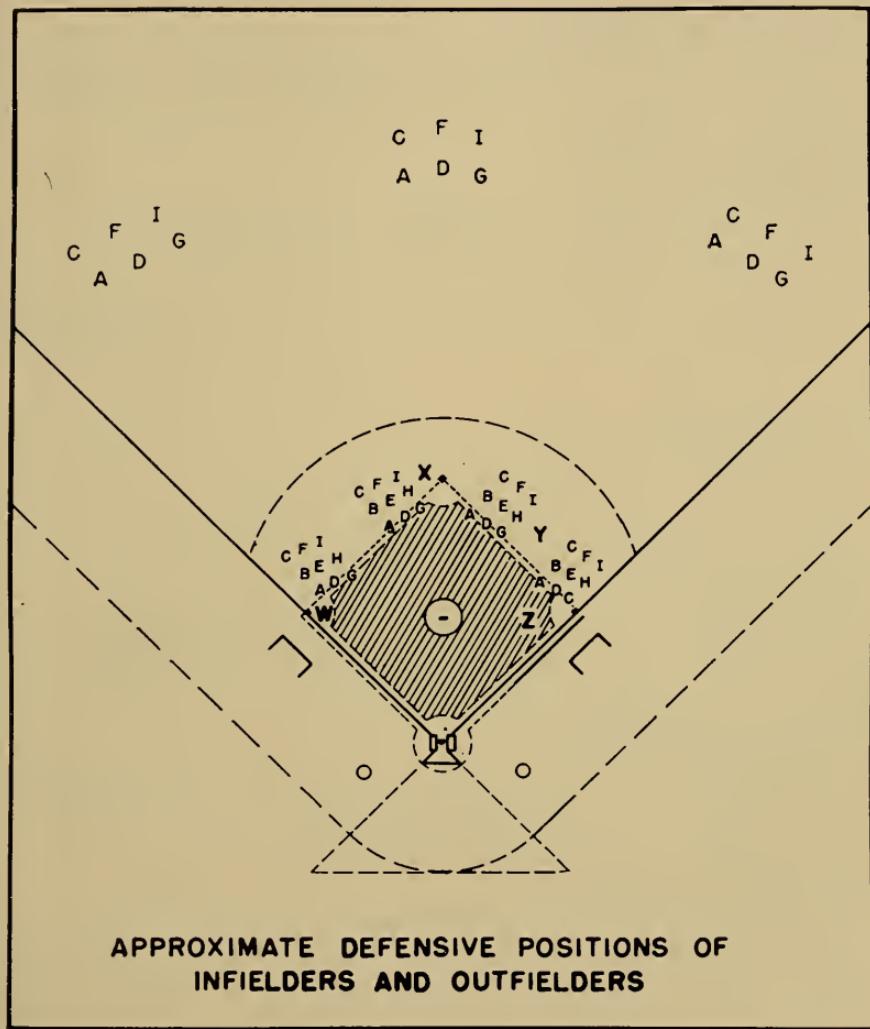
(For the basic drill, see Fielding Drills, Ch. 3, The Pitcher and Pitching.)

A. The third baseman takes his force-out position. The ball is bunted along the third base line, and the pitcher's throw goes to third base for a force-out. In this practice, a runner should occasionally be placed on second base, taking the lead he would normally take if he is held close to the base. He does not break with the delivery action, but only when the ball is bunted, since the practice should conform to game conditions.

B. Throwing to second base after fielding a ground ball is the hardest play some pitchers have to make. The shortstop and second baseman assume their normal double play positions. The coach fungoes a ground ball to the pitcher, who fields the ball, pivots, and throws to second base.

Bad throws are common on this play, and many of them are because the pitcher feels that the infielder who covers will not get there in time. Practice eliminates this hazard.

After these drills have been gone over and thoroughly learned, the pitchers should continue the drills once or twice a week.



APPROXIMATE DEFENSIVE POSITIONS OF INFIELDERS AND OUTFIELDERS

Fig. 97.—Approximate defensive positions of infielders and outfielders.

GENERAL DEFENSIVE POSITIONS: Key to Fig. 97

THE THIRD BASEMAN

For Right-Handed Pull Hitter

Play position A: (1) No outs or one out, possible play at home. (2) With weak hitter at bat for double play. (3) With no strikes on batter and a possible bunt for base hit. (On definite sacrifice situation play on line or closer until two strikes are called. As batter drops bat for bunt, start in fast to cover.)

Play position B: (1) Power hitter, definite double play situation, second to first. (2) Score close, less than two outs, one called strike,

double play not present (batter may still attempt bunt for hit). (3) Fast batter with two strikes called.

Play position C: (1) With two strikes called regardless of outs, and double play situation not present. (2) With two outs, regardless of score and call, play for batter to hit. Move in a step or two for fast runner, or weak hitter.

For Straight-Away Hitter

Play positions D, E, F, for situations as in A, B, C.

For Left-Handed Pull Hitter, or Opposite Field Right-Handed Hitter

Play positions G, H, I, for situations as in A, B, C. Ignore call on batter, playing only positions C, F, I, when runs ahead, and double play situation is not present.

Play H for all double play situations when runs ahead; attempt double, second to first. Sacrifice a run to get the two outs.

THE SHORTSTOP

For Right-Handed Pull Hitter

Play position A: no one out, or one out when play situation is at home plate. Play on line or ahead for fast batter with not much power.

Play position B: for double play, second to first.

Play position C: when definitely playing for batter only.

For Straight-Away Hitter

Play positions D, E, F, for situations as in A, B, C.

For Left-Handed Pull Hitter, or Opposite Field Right-Handed Hitter

Play positions G, H, I, for situations as in A, B, C. Shortstop shifts little as call on batter changes, except on force-out at third.

THE SECOND BASEMAN

For Right-Handed Pull Hitter

Play position A: with less than two outs, and the play situation is at home plate.

Play position B: for double play, second to first.

Play position C: when definitely playing for batter only.

For Straight-Away Hitter

Play positions D, E, F, for situations as in A, B, C.

For Left-Handed Pull Hitter, or Opposite Field Right-Handed Hitter

Play positions G, H, I, for situations as in A, B, C.

Play Y for all sacrifice bunt situations. Be in position to cover first base.

THE FIRST BASEMAN

Play the corresponding positions under the same conditions as does the third baseman.

FOR FORCE-OUT AT THIRD BASE, FIRST AND SECOND OCCUPIED

Third baseman plays position W; shortstop plays X; second baseman plays Y; and first baseman Z, until two strikes are called. Then all assume double play position according to type of batter.

THE OUTFIELDERS

Play positions C, F, I, according to type of hitter. Play deeper if long hitter, closer if weak hitter with little power. Play positions A, D, G, when imperative to cut off run at plate; for example, last of ninth inning, winning or tying run on third and infield in.

PART II

OFFENSE

CHAPTER 13

BATTING AND BUNTING

Skill in batting is a composite of natural ability, confidence, and a knowledge of batting fundamentals. No two players will have the same style in batting, and the man who naturally hits well should be permitted to continue to hit in his natural style. Faults such as dropping the rear shoulder as the swing starts, overstriding, wiggling the bat too much and pressing with the back arm, can be helped by instructions which may remedy the specific weakness. It is also true that a good batter may have a fault which he knows about and for which he will compensate by making a slight change. As long as a batter is hitting the ball well, his natural pattern of action should not be changed. Only when the coach feels that a correction will improve the batter's hitting ability should a change be suggested.

Many poor hitters can definitely be improved by changes in style or form, but their natural ability generally is limited and most of them never will be good hitters.

Natural ability includes muscular coordination, a good batting eye, accurate timing, and baseball sense. All good hitters have confidence in their ability to hit. Regardless of the play situation called for—the hit, the hit-and-run, or the bunt—they feel within themselves that they can execute the play. They are always ready to swing as the pitcher starts

his pitch. Though their stance at the plate may vary, they have good control of their weight and have body balance.

The good batter is observing. While sitting on the bench during his team's time at bat, he should keep an eye out for tip-offs which the pitcher may unconsciously give on particular types of pitches. He also should try to determine what the favorite delivery of the pitcher may be. This can be done in several ways. A catcher will call for a pitcher's favorite pitch much more than other types of pitches, particularly against a good batter. The pitcher will frequently use his favorite pitch when there is a runner on base, and a hit would mean a run. Although the primary object of the good batter is not to guess the pitch, he can often anticipate it to his own advantage by such observations.

A good batter will observe any shift in the defense as he awaits his turn at bat, and as he goes to the batter's box. There are times when he can take advantage of this shift.

For example:

With none out, score tied, no one on base, and the first or third baseman deep, a bunt for a base hit may be attempted.

If the defense is in for a bunt, with a runner on first base, a switch can be made to the hit-and-run; this is true particularly if the second baseman or shortstop leaves his position before the pitched ball passes the batter, who then can try to hit through the opening.

If the pitcher is off balance on his delivery, the batter can also bunt to make the pitcher field the ball.

There are many base hits made off of pitched balls that are not through the strike zone (Fig. 98), but the good batter tries to follow these fundamentals:

1. He swings only at pitches that pass through the strike zone.
2. He tries to keep his eyes on the pitched ball until it meets the bat.
3. He meets the ball well ahead of the plate.
4. He does not swing so hard that he loses his body balance.

Selection and Care of the Bat

The bat selected by the batter should be one that feels right to him, and one which he can control. It should be so balanced that the batter swings the bat, and not so that the bat swings the batter. Many inexperienced hitters try to use a bat too heavy, or too long, feeling they can drive a ball farther. They lose their control and balance with such a weapon, and their timing on the swing is not effective.

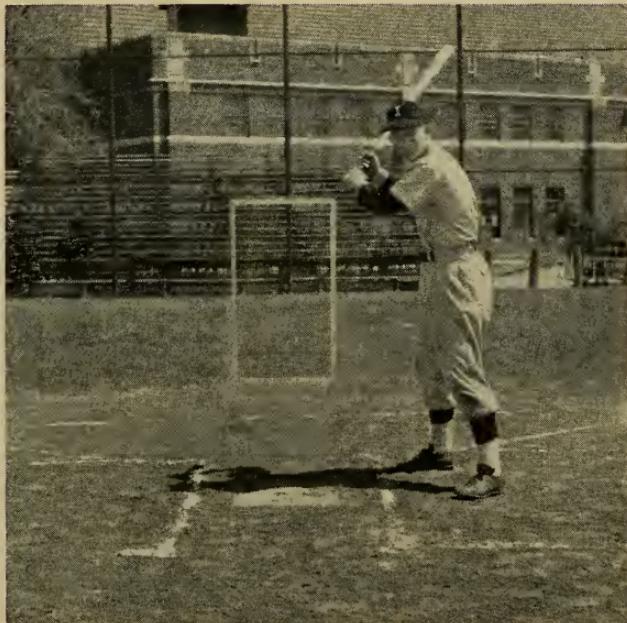


Fig. 98.—The strike zone.

The recommended length of the bat for the average hitter is thirty-four to thirty-five inches; preferably, thirty-four. The recommended weight is approximately an ounce to the inch. A bat should be straight grained. The straight grain seemingly gives more driving power.

There are several things a batter should do to keep his bat in the best condition. He should not permit other players to use it, but use it only for himself; he should rub the bat down with a dry bone or bottle to keep it from chipping; he

should take care not to throw the bat around carelessly, as it may be nicked or stepped on by another player; from time to time, he should put a light coating of oil on the bat and rub it in well and, in wet weather, keep it as dry as possible.

Gripping the Bat

The grip on the bat should be natural; it will vary with each individual. The hands may be together or apart, whichever feels most comfortable to the batter. The fingers and thumbs are well wrapped around the handle, with the front hand grasping the bat nearer the knob. The gripping muscles should be free and relaxed preliminary to the swing, so that a wrist snap can be effected. The bat should never be gripped so tightly that the knuckles of the hand show white; the muscles of the arms will automatically tighten up with the swing.



Fig. 99.—The alignment of the fingers on the bat.

Ordinarily, the knuckles of the hands should be so aligned that the second joints of the fingers of the upper hand are lined between the base knuckles and the second joints of the lower hand (Fig. 99).

Fig. 100.—The end grip.



Fig. 101.—The modified grip.



Fig. 102.—The choke grip.



If a batter has a tendency to grip the bat too hard or does not have a good wrist snap, lining up the second joints of both hands so that they face away from the body will relax the grip and cause a better wrist snap. There are three types of grips—the end grip, the modified grip, and the choke grip.

The end grip is used mostly by long-ball and power hitters who try for extra base hits. The front hand is very close to, or touching, the knob of the bat, with the back hand above the front hand (Fig. 100).

The modified grip is used by many players who feel that it gives them better control of the bat and still gives power in the swing. The front hand is several inches above the knob of the bat, and the back hand is above the front hand (Fig. 101).

The choke grip is used generally by players who feel they can place or “punch” a ball. They are usually not power hitters, but hit the ball sharply. The front hand is quite far above the knob of the bat, with the back hand above the front hand (Fig. 102).

The Batting Stance

The distance a batter stands from the plate varies from player to player. It should be such that he feels he can hit any ball pitched through the strike zone. A useful suggestion for the inexperienced batter is to stand just far enough away from the plate so that he can grasp the bat above the knob with either hand, and, by bending over slightly, touch the outside edge of the plate (Fig. 103). He will then be able to cover the plate with the bat on his normal swing. As the batter gains experience, he will tend to assume the stance most suitable to him.

Some batters will stand well back from home plate and try to step in on all pitches. Usually this type of batter does not take a long stride and waits until the last split-second before he starts his swing. Such a batter normally will have keen eyes and react quickly. Others will stand a medium distance from the plate and stride straight ahead, or slightly

back, according to the location of the pitch. Still others will stand in close to the plate, and, in most cases, pull slightly away from the plate as they stride.

Batters who have a tendency to pull away with their striding foot should stand close to the line of the batter's box nearest the plate. Some good batters have pulled away from the plate or "stepped in the bucket," but invariably these batters shifted their weight to the front foot in their stride thereby getting the full weight of the body into their swing by a body pivot. Inexperienced batters are liable not to do this, keeping the weight on their back foot as they swing.



Fig. 103.—The inexperienced batter taking his distance from the plate.

The following is a suggested method for correcting an ineffective body pivot. As the batter strides forward, the front foot should be placed so that the toe is pointing to the left of second base if a right-handed hitter, and to the right

of second base if a left-handed hitter. As the batter swings, he should stress pivoting his back hip so that at the completion of the swing, the back hip has rotated forward as far as possible, the back shoulder rotating to face the pitcher.

Adjusting the Stance to the Pitcher

An experienced batter will often vary his stance in the batter's box according to the type of pitcher. If the hurler has a good fast ball, the batter will stand as far away from the pitcher as possible. If the pitcher depends on pitches that break, or on slow balls, he will assume a stance in the box as close to the pitcher as possible. When a pitcher has both a good fast ball and a good curve, the good batter sometimes will use a modified or choke grip, giving better bat control.

The Spread of the Feet

The spread of the feet is dependent on the individual batter. Many beginners keep their feet too close together. This often causes a lunge in their stride. As a player progresses, he will adapt himself to his natural spread. This may be close, medium, or wide.

When a batter shows a tendency to lunge on his stride, a wider initial spread of the feet generally will help. The batter can only stride so far, and by widening his spread, he will shorten his stride. This also helps eliminate striding too soon. The consensus of coaches and baseball men is that the average spread should be about eighteen inches, while the stride for the average batter should not be over eighteen inches. Power hitters, however, will often take a longer stride.

In relation to alignment with home plate, there are three standard stances: the parallel, the closed, and the open.

The parallel stance is one in which both feet are approximately the same distance from the home plate line of the batter's box (Fig. 104).

The closed stance is one in which the front foot is closer to the home plate line of the box (Fig. 105).

Fig. 104.—The parallel stance.

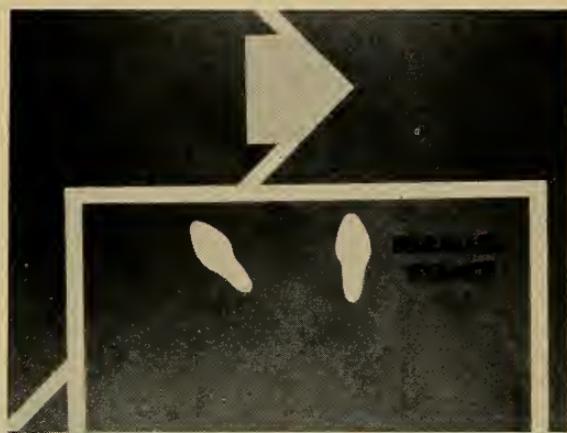


Fig. 105.—The closed stance.

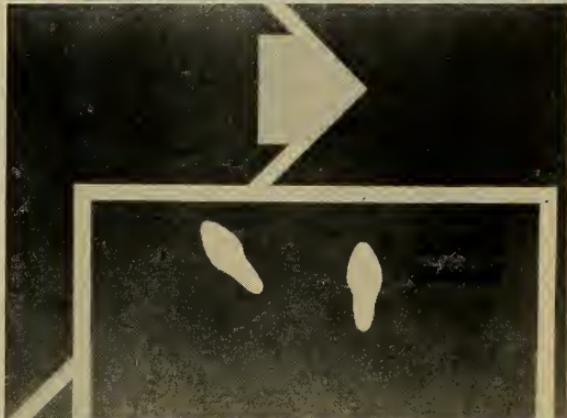
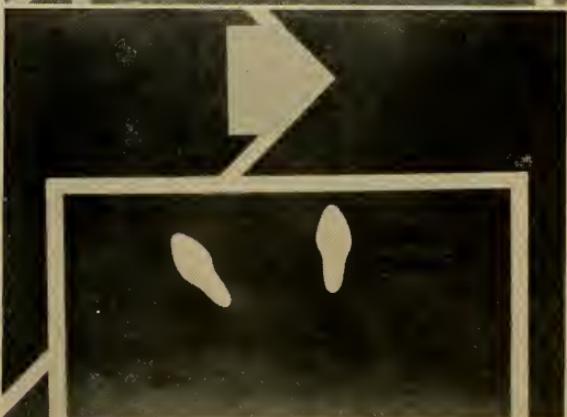


Fig. 106.—The open stance.



The open stance is one in which the front foot is farther away from the home plate line of the batter's box (Fig. 106). Personal preference governs the batter's choice of stance.

The Ready-to-Hit Position

The bat may be swung back and forth or wiggled a few times to loosen the muscles before the swing. The tendency to overdo this, however, should be avoided. If the batter does overdo, a smart pitcher will deliver the ball as the batter swings his bat forward. Often the batter then cannot recover in time to hit the ball squarely.



Fig. 107.—The ready-to-hit position.

Just before the swing starts forward, the bat should be held or brought well back over the back shoulder. The arms should be comfortably away from the body with the elbows bent. Any tendency to press should be avoided. The body, including the knees and hips, should be relaxed and comfortable. The

shoulders should be as level as possible. The batter is now ready to hit (Fig. 107).

The Stride and Swing

The weight of the body is evenly distributed on both feet, and as the pitcher delivers the ball, the weight is shifted to the back foot. The hips, shoulders, and arms pivot back. The wrists cock the bat farther back over the back shoulder, but the head does not move backward.

The weight is now on the back foot, and as the pitch comes toward him, the batter strides smoothly and easily forward with the front foot, shifting his weight to this foot (Fig. 108). The weight shift is made by pushing off the inside of the back foot. As the front foot hits the ground in the stride, the front leg braces, so that the swing is against the braced front leg.

The swing continues with a forward pivot of the hips and shoulders, followed by the forward swing of the arms. The forward arm guides the swing through the arc. The back arm helps put the power into the swing and should be kept free from the body. The head should be held steady and firm, with the eyes on the ball. Every effort should be made to follow the flight of the ball from the pitcher's hand until the ball is hit (Fig. 109).

As the weight shifts to the front foot, the hands are brought well in front of the body (Fig. 110). The back foot pivots inward, the heel lifting off the ground, the toe staying on the ground.

The back hip pivots into the swing, thus pulling the front hip out of the way. The wrists snap into action and immediately after the bat meets the ball, the wrists roll over (Fig. 111). The swing continues to a full follow through. A good swing is one that carries through a flat arc of approximately 360° (Fig. 112).

After a batter has learned the fundamentals of batting, there are several procedures he can follow that may improve his skill. If he will delay his stride until the last possible

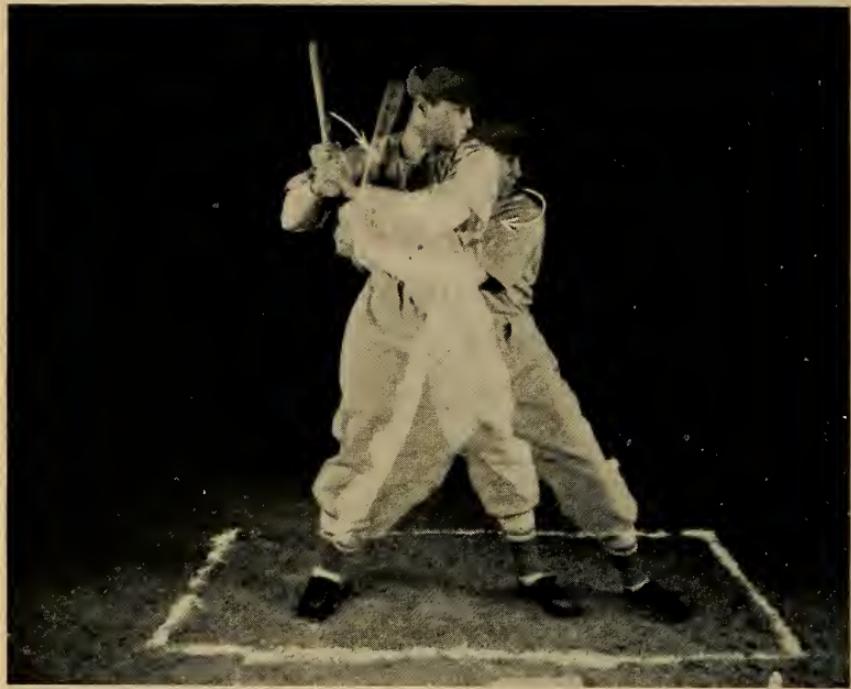


Fig. 108.—The weight shift and wrist cock.

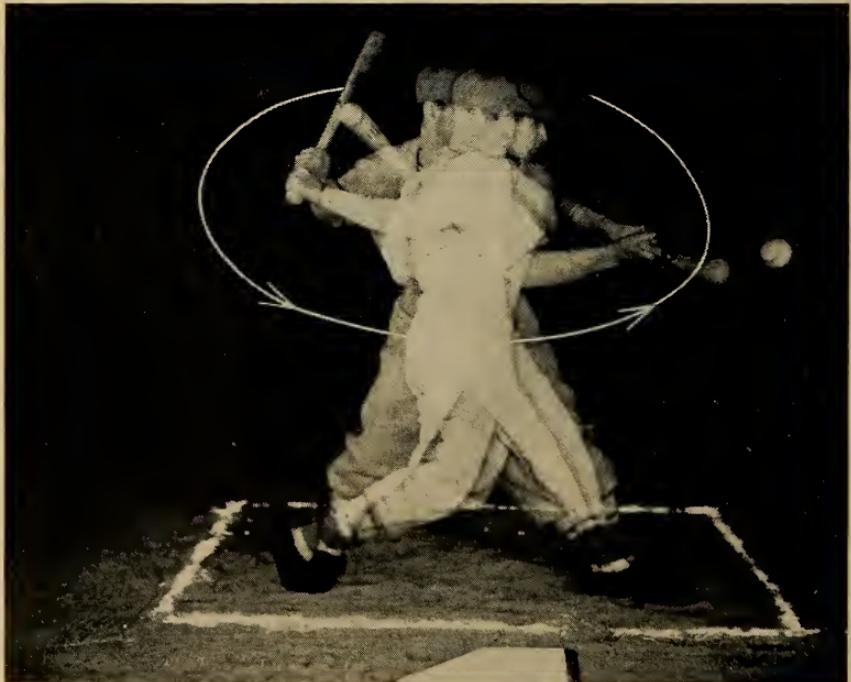


Fig. 109.—The body pivot.

second, he will learn to step into or away from the pitch, depending on where the pitch may be. This will improve his timing and make it possible for him to pull an inside pitch, and hit an outside pitch to the opposite field.

Many players stride easily, but are weak on curve balls and slow pitches. This type of batter transfers his weight too soon, and when the speed of the ball is changed, he will hit the ball, for the most part, with the power of his arms alone.



Fig. 110.—The lead of the hands on the swing.

With experience the batter will decide for himself whether he is the type to make a hard swing with the purpose of hitting the ball for great distances, or if he should instead meet the ball with a firm moderate swing. The coach should advise the hard swinger to change, if he sees that he has poor timing.

When a batter wants to hit to the opposite field, he will learn to push his hands well ahead of the barrel of the bat,

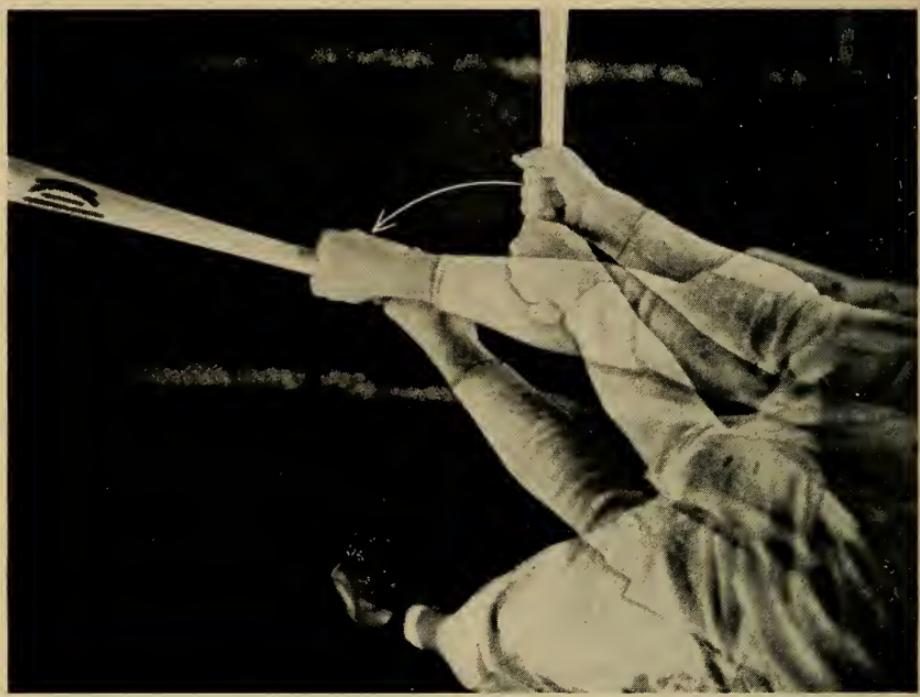


Fig. 111.—The wrist snap.

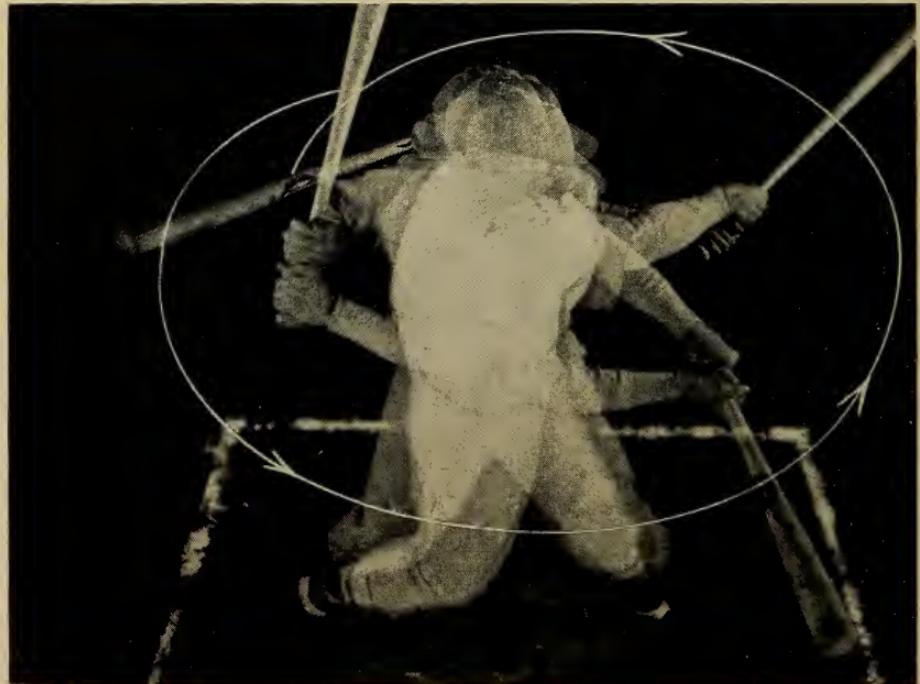


Fig. 112.—A good swing.

hitting the ball with a stiff wrist action instead of a snap. This applies particularly to the right-handed batter, hitting behind a runner, as in a hit-and-run play.

The Batting Slump.

A batting slump may be caused by a loss of confidence, a change in batting style, trying too hard, or for some similar reason. When it happens, the player must have patience and the coach must have both tact and a talent for observation. A mechanical error can be caught by watching the player's hitting; a loss of confidence may come out only through friendly discussion. As soon as the cause is learned, a correction generally can be made.

At times a change in stance or using a heavier or lighter bat will be all that is necessary, particularly where there is a loss of confidence. As soon as the batter hits the ball well a few times, he will usually come out of his slump. A change in style can be corrected by having the batter concentrate and practice conscientiously.

POINTS TO REMEMBER

The batter should swing two or three bats as he goes to the plate, then the single bat that is used will feel lighter and be more easily controlled.

If the ground is wet or damp, the spikes on the shoes may become clogged with mud. Some implement should be kept on the bench for cleaning the mud out of the spikes. The batter may also remove the accumulation of mud by tapping the sides of his shoes with the bat when he reaches the batter's box.

On the hit-and-run play it is best to just meet the ball, attempting to keep the ball on the ground. This helps eliminate the possibility of a double play on a line drive or fly ball.

A right-handed batter can use a shift on the hit-and-run play which will help him hit the ball behind the runner. He takes his normal stance, and just as the pitcher starts his

delivery the batter steps backward with his right foot, shifting his weight to his right foot. If the pitch is outside, the batter strides diagonally in toward the pitch with his front foot. If the pitch is inside, he strides away from the pitch with his front foot, bringing his hands well ahead of the barrel of the bat. By meeting the ball with stiffened wrists, he can learn to hit the ball toward right field.

When a left-handed batter attempts to hit the ball behind the runner, he should stand closer to home plate and choke his bat. He can then pull an outside pitch toward right field.

BUNTING

Any player should, with practice, learn to bunt a ball reasonably well. Theoretically, a batter catches the ball on the bat, the body and arm actions being very similar to those used in catching a ball.

There are two types of bunts—the bunt for a sacrifice, and the bunt for a base hit.

The Bunt for a Sacrifice

This type of bunt is used to advance a base runner or runners, with the assumption that the batter probably will be thrown out. Usually the defensive team sets its defense for a bunt, when the play situation warrants it; consequently, the batter need not disguise his intention to sacrifice. He should do everything he can to bunt the ball safely to the proper spot. He should shift his position from the normal batting stance to the bunting stance, just as the pitcher starts his delivery.

There are several shifts that can be used for the sacrifice bunt. If the batter stands close to the home plate line of the batter's box, he pivots on the toe of the back foot, pushing off with the front foot. He brings the front foot back and almost parallel to the back foot in a comfortable spread stance, and faces directly toward the pitcher.

If the batter stands back from the home plate line of the batter's box, he should pivot on the heel of the front foot,

and at the same time push off the back foot. He brings the back foot close to the home plate line of the batter's box, with the feet comfortably spread, and almost parallel, and faces the pitcher (Fig. 113).

Sometimes, because of the batter's initial stance, it will be necessary to shift both feet. In this case, he steps in close to the inside line of the batter's box with his back foot, and shifts his front foot back almost parallel with the back foot in a comfortable stance and faces the pitcher (Fig. 114).

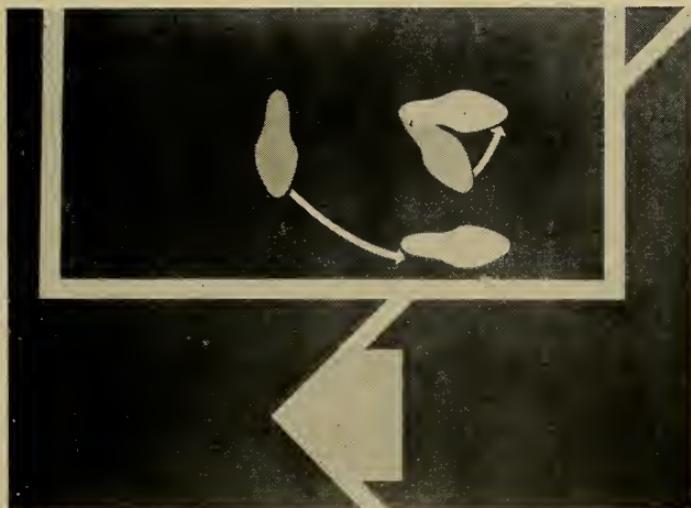


Fig. 113.—The shift, moving up the back foot.

As the batter pivots on his feet, the upper hand slides up on the bat to a position close to the trade mark, the lower hand holding its normal position, controlling the bat (Fig. 115). The upper hand grips the bat very lightly, merely holding it for balance, the fingers underneath and the thumb on top (Fig. 116).

With the eyes following the ball, the body is slightly crouched, and the weight is on the balls of the feet and slightly forward. The bat is held parallel to the ground with the arms relaxed and slightly bent at the elbows, but well out ahead of the body (Fig. 117).

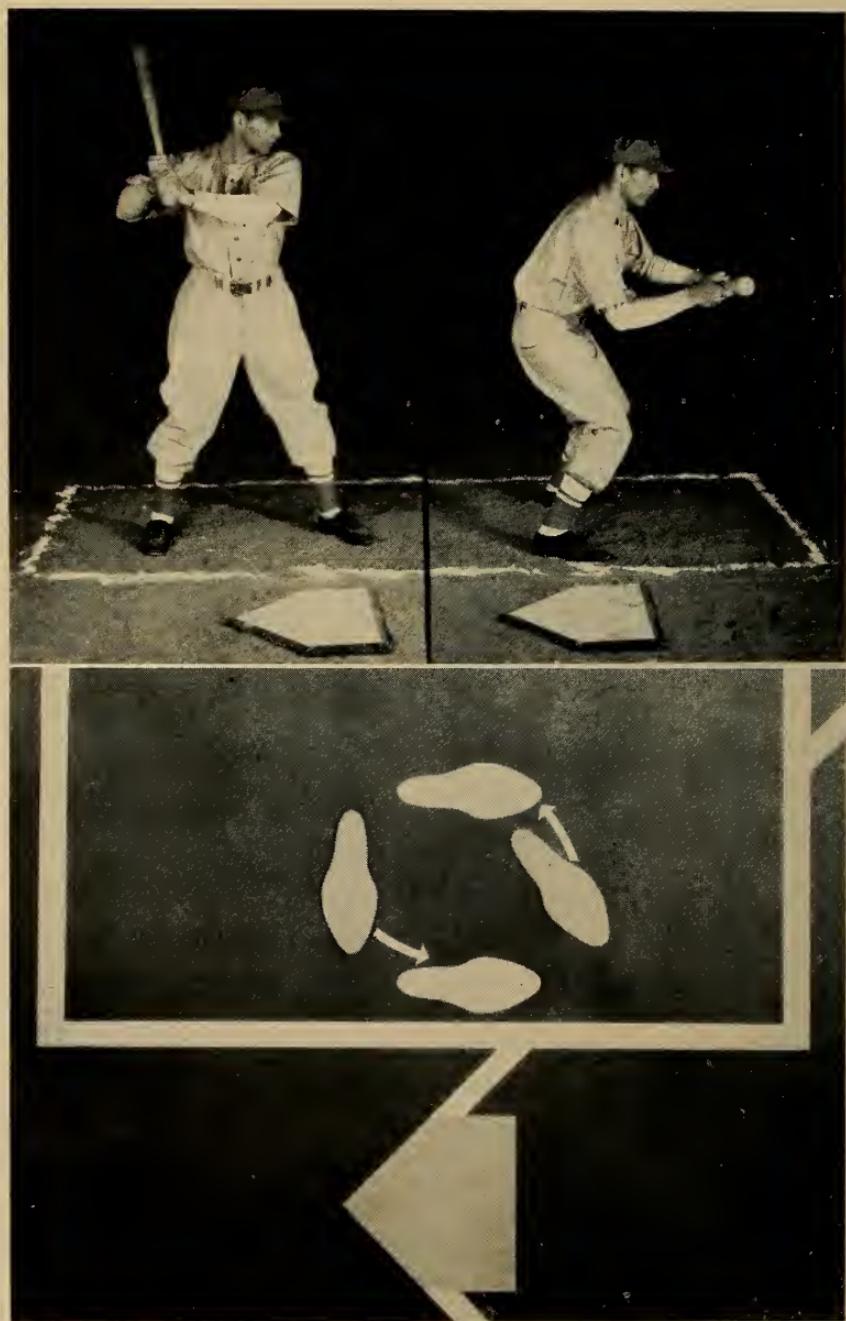


Fig. 114.—The shift moving both feet.

Fig. 115.—Sliding the upper hand to position for the bunt.



Fig. 116.—The grip of the upper hand for the bunt.

The bat is kept as level as possible and parallel to the ground. The ball is bunted by raising or lowering the body from the waist and knees, with as little movement of the arms as possible. The batter should keep in mind that he is trying to *catch* the ball on the bat (Fig. 118).

As the ball hits the bat, the bat will give, and since it is held loosely the contact will be deadened, thus preventing the ball from bouncing too far. A good bunter can place the ball down toward third or first base by shifting the bat with the near hand, so that the bat points at right angles to the appropriate line.

However, unless the batter is a good bunter, he should bunt the ball according to the pitch. With a right-handed batter, an inside pitch should be bunted toward the third base side of the diamond; with a left-handed batter, toward the first base side. Some batters feel they have better control of the bat if they slide both hands up close to the trade mark. In this case, the upper hand is held the same as before, while the lower hand controls the bat. This is not the preferred method, however.

The bunt for a sacrifice should roll about thirty feet, preferably along either the third or first baseline. However, if the pitcher is known to be a poor fielder of bunts, the ball may be bunted to his right or left, and about thirty feet from the batter, forcing the pitcher to field the bunt. The batter should be certain to get set in ample time and should not start toward first base until the ball has been bunted. This will help eliminate bunting a pop fly and also bunting the ball too hard.

The Bunt For A Base Hit

On the bunt for a base hit, the ideal bunt is one approximately thirty feet from home plate and along the third base line. It is used when the third baseman is playing deep or when the third baseman or pitcher fields bunts poorly. The feet are shifted as little as possible and then only at the last split-second. The body actions should be the same as in batting, until the pitcher releases the ball.

Fig. 117.—The set sacrifice bunt position.

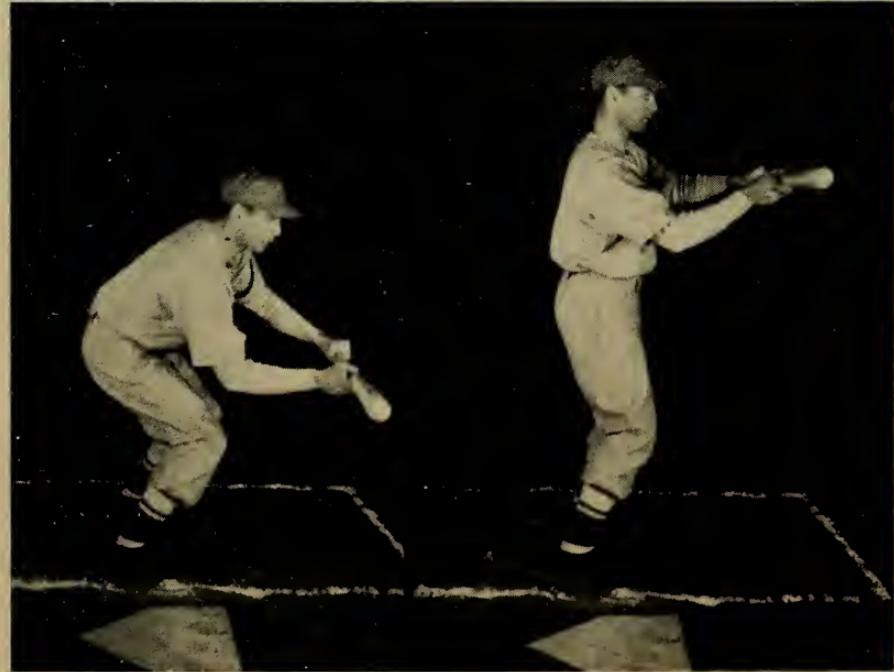
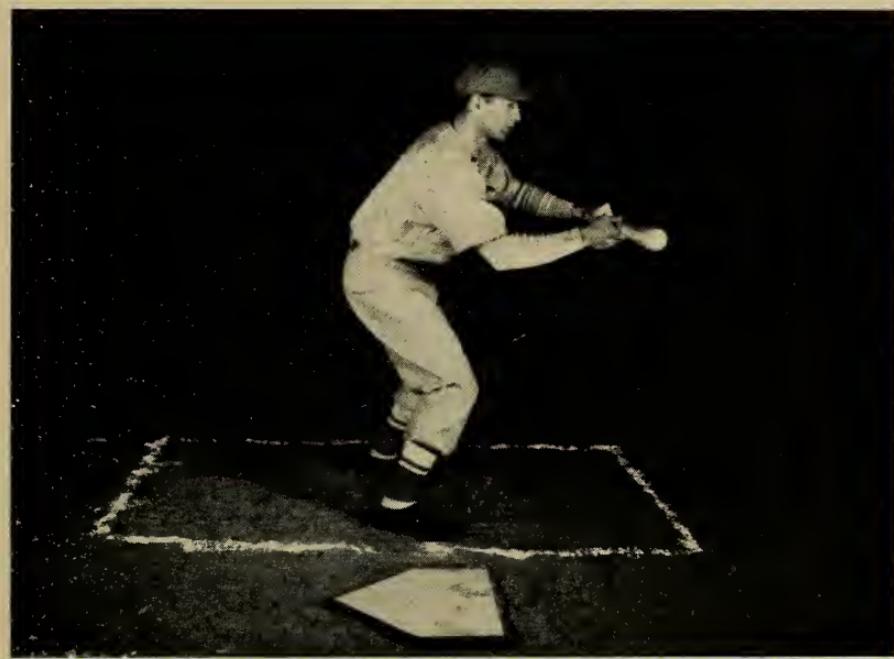


Fig. 118.—Raising or lowering the body to bunt the ball.

As the pitcher releases the ball, the batter steps slightly toward the pitch with his front foot, bringing the bat to the bunting position (Fig. 119). He may also take a short step backward with the front foot, then step toward first base with the back foot as he bunts the ball.

The ball is pushed or pulled by manipulating the near hand on the bat handle, in this way sending the ball in the desired direction. The bunt for a base hit is used, primarily, by fast runners.



Fig. 119.—Bunting for the base hit (the shift).

Some experienced batters will use this method of bunting for the sacrifice bunt, but for the average batter, the first method is more satisfactory. Inexperienced batters, using the "concealed intent" method, will bring the bat around too late, and will have a tendency to start toward first base too soon. This will move the bat forward at the time of contact with the ball, and the ball will often be bunted too hard, or popped up.

The Drag Bunt

The drag bunt is executed by a left-handed batter, usually when the first baseman plays deep. The objective is to bunt the ball to the left of the pitcher, and hard enough so that the pitcher cannot field the ball, forcing the first baseman or second baseman to do so. It is played for a base hit, usually when there are no runners on base. It should not be tried when the offensive team is runs behind.

The intention to bunt is concealed until the last split-second. The batter takes a step toward first base as he contacts the ball with the bat. The bat is held more firmly than in other types of bunts, and on the stride the bat is approximately at right angles to the side of the body. The top hand does not slide up as far on the bat as on the sacrifice bunt (Fig. 120).

A right-handed batter may execute a bunt similar to the drag bunt. On this play he attempts to bunt the ball past the pitcher's right, forcing the shortstop to field the ball. It can be used if the shortstop is playing deep and the third baseman is playing in close and coming in fast in anticipation of a bunt. If properly done, the third baseman will not be able to field the ball because of over-running it.

The batter takes his first step toward first base as the bat contacts the ball. The bat is held firmly with the upper hand which slides toward the barrel of the bat just before contact. The lower hand guides the bat for the placement of the ball (Fig. 121).

The Push Bunt

The push bunt is executed by a right-handed batter. His purpose is to bunt the ball to the pitcher's left, and past him, forcing the first or second baseman to field it (Fig. 122). It is played for a base hit, and when the first baseman is in his deep position. It should not be played if the offensive team is runs behind. A left-handed batter may use a similar bunt, pushing the ball to a pitcher's right, and past him, forcing the shortstop to field the ball.

The hands grasp the bat more firmly than for a sacrifice bunt. The arms are extended forward to contact the ball

Fig. 120.—The drag bunt for a left-handed batter.



Fig. 121.—The step and position of the bat for the right-hander's drag bunt.

Fig. 122.—Bat position for the push bunt. Right-hander.

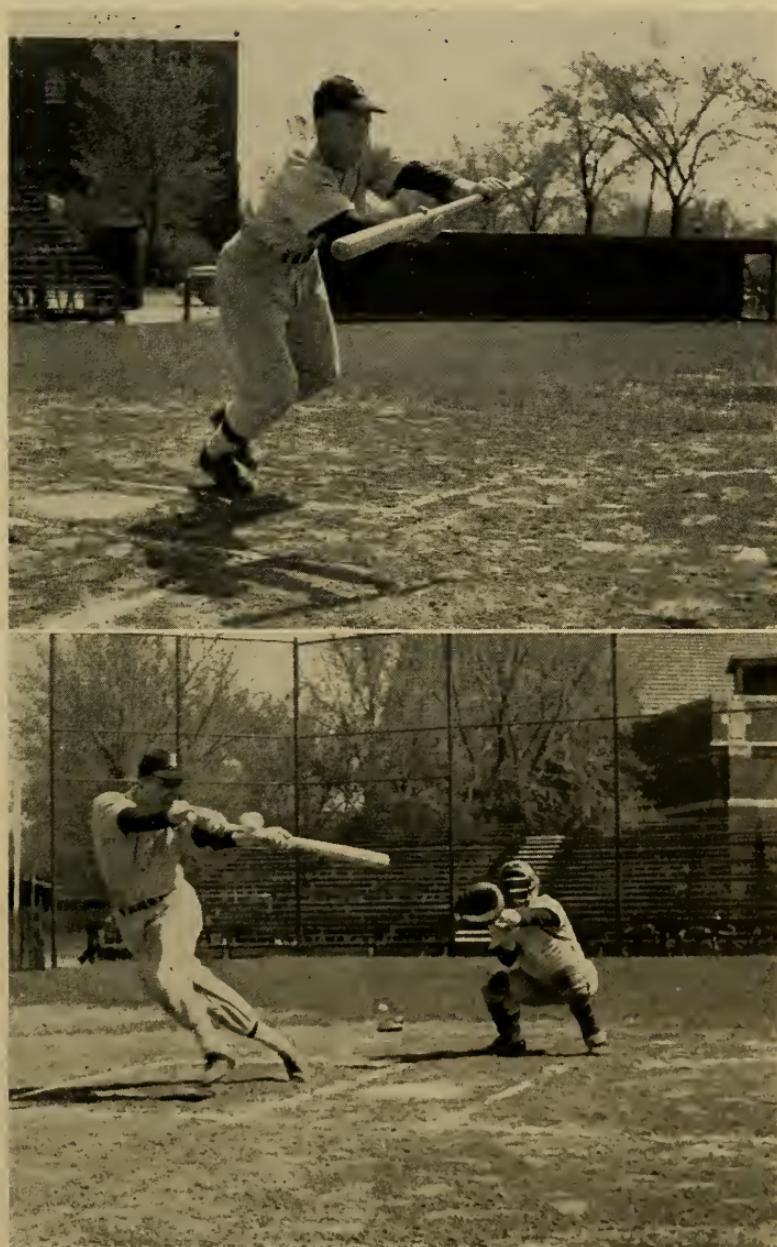


Fig. 123.—Arm position and stride as ball is contacted on push bunt. Left-hander.

with the bat. The wrists stiffen as the bat contacts the ball, and the batter takes a stride toward first base, leaning his body forward at the same time (Fig. 123).

Hints on Sacrifice Bunting

Placement of sacrifice bunts is dependent on the type of pitch, which bases are occupied, the defensive positions of the opposition, and their ability to field bunts. Normally the sacrifice bunt should not be used unless the runner or runners, advanced, could tie the score or put the offensive team ahead.

With first base occupied, it is good baseball to bunt down the first base line. The first baseman must hold the runner on first base, and will therefore not be in a good position to field the ball, since he does not leave the base until the pitcher delivers. The ball should be bunted to a spot about thirty feet from home plate. The only exception is the bunt-and-run play. The ball should then be bunted down the third base line forcing the third baseman to field it. A fast runner may then be able to advance from first to third base.

With first and second bases occupied, the fielding ability of the pitcher and first baseman is considered. If the pitcher is the poorer fielder, the ball should be bunted down the third base line. If the first baseman is the poorer fielder, the ball should be bunted down the first base line. In this situation, the defensive team will usually be instructed to play for a force-out at third base. This bunt is also bunted to a spot about thirty feet from home plate.

If the pitcher does not break for the third base line immediately after he delivers the ball, the bunt should go close to the third base line. Sometimes the first baseman will charge straight in; if he does, a push bunt past him may be successfully executed by a right-handed batter.

With second base occupied, the batter should try to bunt the ball toward the third baseman. He will have to come in to field the ball and third base will be uncovered. If it is an outside pitch, the ball may be bunted down the first base

line. A throw from the first baseman to third base would necessitate the tagging of the runner advancing from second base.

Pitchers are usually advised to pitch high and inside if a bunt is expected. The batter should, therefore, be in a fairly upright position, so that he will be above the ball with his bat as he bunts the pitch, thus decreasing the danger of bunting the ball into the air.

If either the defensive third baseman or first baseman is playing back, or part way back, the batter should attempt to bunt the ball to the player farthest from him. If either is a poor fielder, and both are playing in for the bunt, the bunt should go toward the poorer fielder.

Hints on the Bunt for a Base Hit

The bunt for a base hit is usually played if the batter's run would be the tying run, or if it will put his team ahead. It is not advisable to play the bunt for a base hit if the offensive team is runs behind.

If the pitcher, or the first or third baseman is a poor fielder of bunted balls, the bunt should be in the direction of the poorest fielder.

If the first baseman or third baseman is playing deep, the bunt should be in the direction of the deeper player.

If the pitcher uses slow pitches and curves, it is easier to bunt the ball on the ground than if he is a fast-baller.

Do not play the bunt for a base hit with two strikes called. Do not play the bunt for a base hit with two outs, unless the next batter is a long-ball hitter.

CHAPTER 14

BASE RUNNING

Speed afoot is an asset to a base runner, but hustle, the ability to slide well, and a capacity for quick, accurate decisions are factors of equal importance. A hustling base runner is always alert to the possibility of an error, slow handling of the ball, or a poor throw. He knows which defensive out-fielders have the weaker throwing arms, and looks for the opportunity to take advantage of the weakness and get an extra base.

A batter becomes a base runner at the moment he hits a ball into fair territory; at the moment a third strike is missed or dropped by the catcher, provided that first base is unoccupied and there are fewer than two outs. (With two outs, the batter may run for first base, even if it is occupied.) The batter is entitled to first base automatically, after four balls are called; after an interference by the catcher; after being hit with a pitched ball; or an interference by the base runner on a fairly batted ball.

In case the fourth ball gets away from the catcher, the batter should hustle to first base, with the possibility of advancing an extra base if the catcher does not retrieve the ball in time. When an interference occurs, or he is hit by a pitched ball, the batter cannot advance beyond first base until after the pitcher has again assumed his pitching position.

From the Batter's Box to First Base

The swing of the bat of a right-handed batter carries him around and away from first base, but his weight should shift

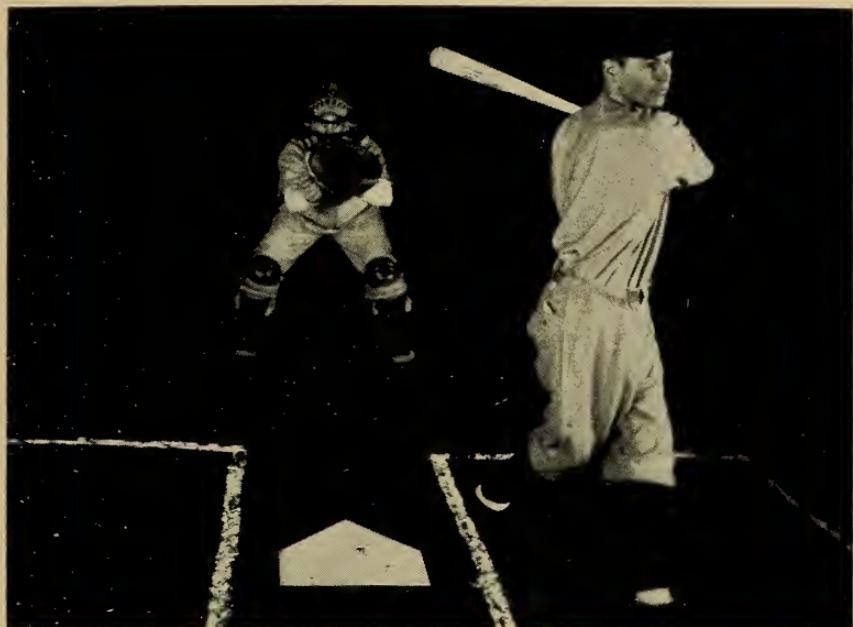


Fig. 124.—A right-handed hitter's weight shift to his left foot on his swing stride.

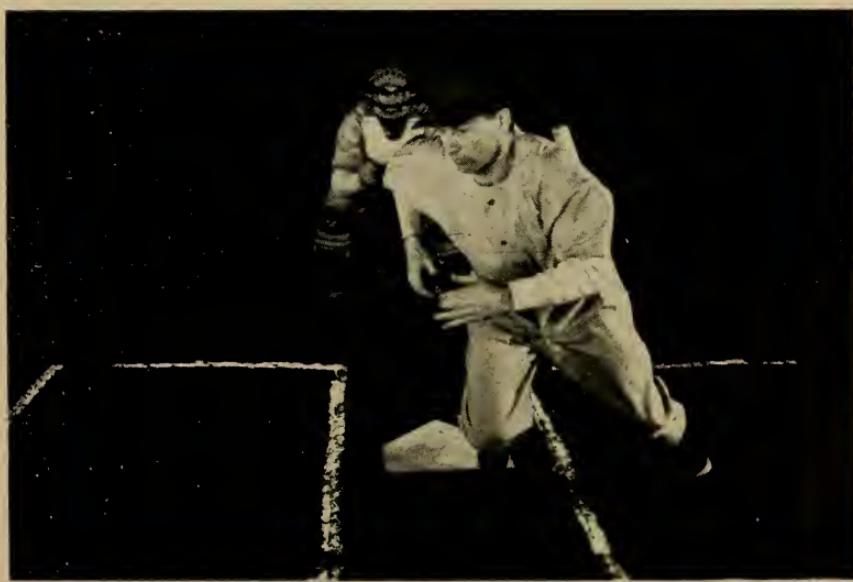


Fig. 125.—The first step with the right foot.

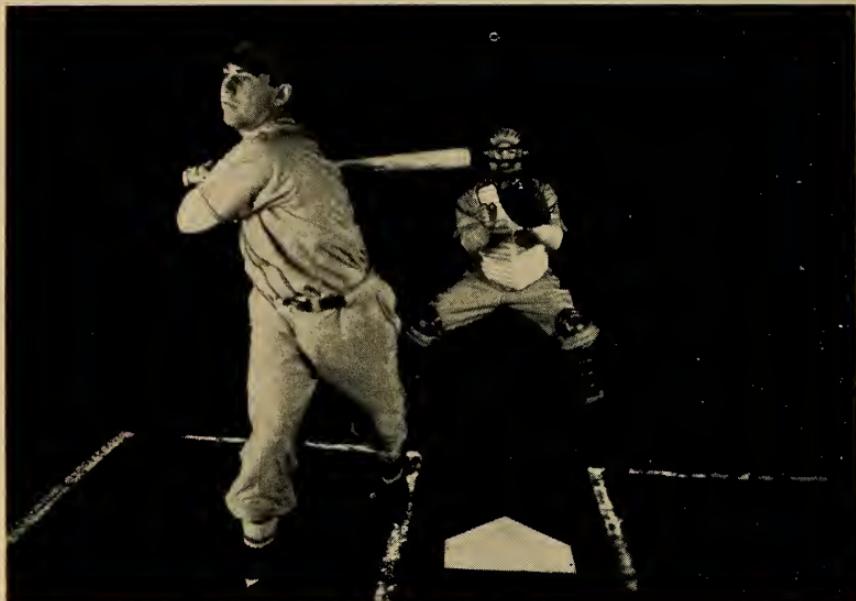


Fig. 126.—A left-handed batter's weight shift to his right foot on his swing stride.



Fig. 127.—The push-off with the right foot for the first stride with the left.

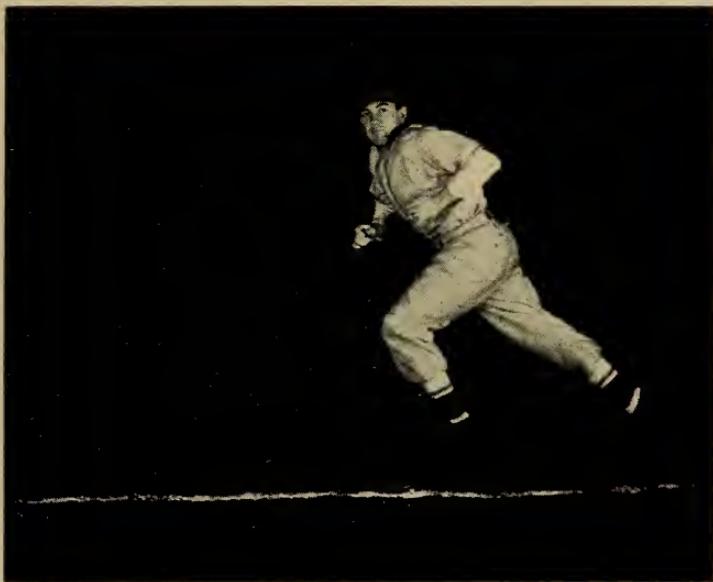


Fig. 128.—The batter runner locating a ball hit to the left field side of the diamond.



Fig. 129.—Running over first base.

to the left foot on his stride (Fig. 124). He should attempt to push off from the left foot, throwing his body in the direction of first base, and take his first step toward first base with his right foot (Fig. 125).

As a left-handed batter swings, his follow-through and stride carry him toward first base (Fig. 126). He should attempt to push off with the right foot as he starts his run to first base (Fig. 127).



Fig. 130.—Making the turn at first base.

Many batters will take their stride and then shift their weight back to the rear foot, pushing off this foot as they take their initial step toward first base. This movement costs them one step in their start toward the base and should be avoided.

When the ball is hit into the right field side of the diamond, the play is in front of the batter-runner and he can easily see what happens to the ball. When the ball is hit to the left field side of the diamond, the batter-runner should take a quick glance over his shoulder to locate the ball as he runs to first base (Fig. 128). He then will often be able to decide whether to make the turn, run straight through, or continue on to second base. He should also look at, and listen to, the first base coach for instructions.

Fig. 131.—Running for a two-base hit.

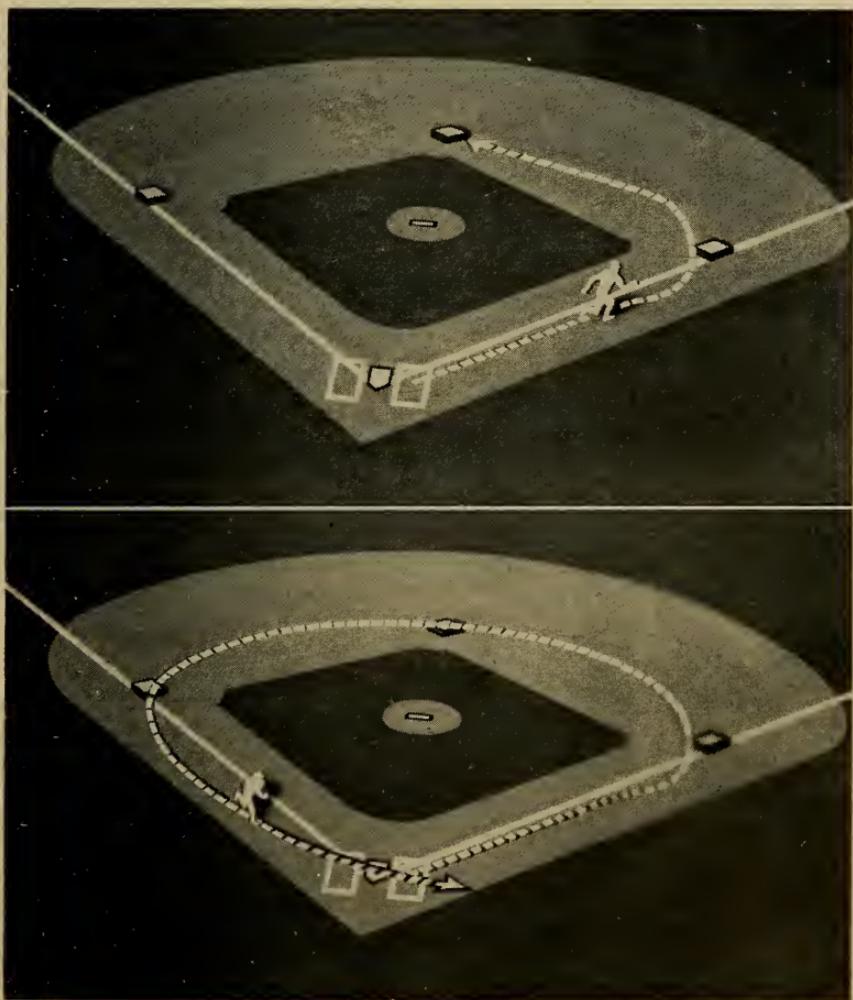


Fig. 132.—Running for a home run.

If the ball is hit in the home plate area of the diamond, the batter-runner should run the last forty-five feet to first base in the three-foot lane marked in foul territory, so as to avoid interfering with a play that may be made on him. If he does not, and a play is made, he is automatically out.

On any play that looks close at first base the batter-runner should run over it, without slackening speed and in a direct line (Fig. 129). He should not jump at the base as he reaches it, but take his normal running stride, shortening the step on the base or lengthening it. This eliminates the possibility of turning an ankle.

If the ball is hit to the outfield, the batter-runner should always think of the possibility of advancing an extra base. He should make a turn at the base by leaning his weight to the right, several steps before the base is reached, thus cutting an arc as he comes into it. (Fig. 130). He steps on the infield corner of the base with either foot so that his stride is not broken and continues his turn without slackening his speed. He decides after the turn is made if there is a possibility of continuing on to second base. Many batter-runners do not run hard after a fly ball is hit, and consequently miss the chance of advancing an extra base if the ball is not caught. Should first base be occupied in this situation, the batter-runner must be careful not to pass the runner occupying the base. If he does so, he is automatically out. The first base coach must be alert to such a play and advise the batter-runner by telling him to watch the advance runner.

Running for Extra Bases

After the turn at first base, the run for a two-base hit should straighten out as the base runner approaches second base (Fig. 131). If the hit is for three bases, the run from first base through second base is a continuation of the arc, which straightens out as the batter-runner approaches third base. If the hit is for a home run, the arc continues from first base through second and third bases and on to home plate (Fig. 132).

When a ball is hit into left field for extra bases, the runner himself should decide whether he shall advance to third base

since the play is in front of him. If, however, the ball is hit into right field and behind him, he will often not know what to do. In this case, the runner, as he approaches second base, should look at the third base coach. The coach should then signal to him to hold up or to continue on to third base. (See Ch. 16, Directing Team Play—Duties of the Third Base Coach.)

When a runner comes into third, he should always get his instructions from the third base coach. (See Ch. 16, Directing Team Play—Guiding Runners to Third Base and Home Plate.)

A preceding runner running for extra bases should do the same. As soon as he crosses home plate he should turn and face any succeeding runner, advising him what he should do—slide, hold up, or hurry. If the batter-runner's bat or the catcher's mask have been dropped and may interfere with the succeeding runner or runners, the preceding runner tosses them out of the way as soon as he crosses the plate.

Sliding Into First Base

The batter-runner slides into first base when the throw to the first baseman is high and to his left, pulling the first baseman off of the base and toward the home plate side of the bag. The runner should also slide when the play at first base is close and the first baseman or pitcher runs across the base to make the play. The slide avoids a collision with the defensive player. He may also slide on a close play when the first baseman covers the base, since the umpire will usually watch the runner hit the base, and listen for the thud of the ball into the first baseman's glove in timing his decision.

TAKING LEADS

When First Base Is Occupied

In holding his base, the runner should stand with his left foot touching the inside edge of the bag, facing toward the pitcher until the pitcher assumes his pitching position (Fig. 133). While holding the bag, he gets the signal from the head coach, first base coach, or batter, depending on the signal system, for the next play. He must also be aware of the other runners on base, the outs, the score, the inning,

the call on the batter, and the strength and weakness of the opposition. If he does not get the signal, he should call time and adjust some part of his uniform—tying the shoe is a common device. This maneuver indicates to the coach involved that the signal is not clear, and it should be repeated. When the runner has it, he steps back into the holding position and takes his lead as soon as the pitcher assumes the pitching position.



Fig. 133.—A runner's position on first until the pitcher assumes his pitching position.

In taking his lead, the runner should not jump off the base, but take a cross-over step with his left foot, then step out with the right. The following steps are glides, the right foot stepping out, the left following. The glide places the runner in good position to return to the base quickly, should the pitcher attempt a pick-off. The runner should always keep his eye on the pitcher and listen to the first base coach for instructions.

This is also the time to study the pitcher's moves for help in timing an attempted steal.

As the pitcher delivers to the plate, the runner should make a break of two or three steps, so that he can advance if the ball gets away from the catcher.

When Second Base Is Occupied

The runner takes his lead off second base only when he is sure the pitcher has the ball. This may seem like obvious advice, but the old hidden ball trick is still pulled successfully several times every season in the major leagues. The runner should keep his eyes on the pitcher and listen to the coach at third base for instructions. The coach should advise him to "get back," or "stay up," or "get off." When the coach calls "get back," the runner should not go all the way to the base unless the pitcher actually pivots and throws; otherwise, he simply moves into a position from which he can easily reach the bag. It is important that he not be moving toward second base as the pitcher delivers the ball to the batter; he might lose valuable time if the ball is hit.

When Third Base Is Occupied

The initial lead of the runner on third base should be not more than a step farther from the bag than the third baseman's defensive position at the time; that is, the runner should not give the third baseman more than a one-step advantage if there is an attempted pick-off. The lead should be in foul territory, so that a fair ball hit along the line will not hit the runner. As the pitcher starts his windup, or delivers the ball from the set position, the runner starts toward home plate. The specific distance depends upon the runner's judgment; it must be long enough that he has a good jump if the ball is hit, or the catcher misses the ball, but not so far that he cannot get back safely after the ball passes the batter.

When the runner on third base is the tying or winning run, and the pitcher takes a slow windup, he should make an occasional long break to worry the defense with the possibility of a steal of home. This tends to upset the pitcher's control. The same holds true with runs ahead.

BASE RUNNING ON BATTED BALLS**When First Base Is Occupied**

As the pitch is made, the base runner makes his break toward second base as previously stated; if the ball is hit fair, he continues to advance. If it is a fly ball that may be caught, his lead should be such that he can easily advance to second if it is not caught. If the ball is a long fly that probably will be caught, the runner touches up, prepared to advance as the outfielder catches the ball. The touch up is made by facing the fielder making the catch, one foot on the near edge of the base, the other parallel and in the direction of the next base. As soon as the fielder touches the ball, the runner may advance.

On all base hits to the outfield, the runner should advance to second base as fast as possible, prepared to advance an extra base if the ball is fumbled, or if the outfielder handles it slowly.

When the hit-and-run or steal-and-hit are played and the ball is hit behind the runner, so that he cannot locate it immediately, he should look at the third base coach for instructions.

When Second Base Is Occupied

The runner should advance to third base on ground balls hit to the second baseman or first baseman. If, with less than two outs, the ball is hit hard to the third baseman and fielded, the runner should not attempt to advance. If the third baseman bluffs the runner back to the base before he throws to first, the runner cannot advance unless the throw is bad or the first baseman has a poor throwing arm. The above holds true if there are less than two outs and the ball is hit hard at the shortstop or to the shortstop's right.

On short fly balls, with less than two outs, the runner takes such a lead that he can return to the base if the ball is caught and advance quickly if it is not. On long fly balls he should tag up and attempt to advance as the fielder touches the ball. If the ball is not caught, he should be able to score, of course.

When Third Base Is Occupied

Regardless of the number of outs, if the infield is playing its normal or deep position, the runner should attempt to score on any ground ball hit to an infielder except one hit directly to the pitcher.

If the infield is playing close with no outs and a ground ball is hit hard at an infielder, the runner should hold up but be alert for a possible error on which he can score. With one out, if he is a fast runner, he can attempt to score on slowly hit balls, or balls hit to either side of an infielder who will be pulled into an unbalanced position in making the play.

The runner on third base should touch up on all long fly balls hit to the outfield. If it is a base hit he can easily score; if the ball is caught, he still is in position to make it. He also will be in a position to score, should the outfielder catch a ball that looked as though it would drop safe. On short fly balls, when the outfielder comes in fast and it looks as though he will make the catch with only a short throw to make, the base runner should take a lead off of the base. If the ball is caught, he gets back to third in a hurry. If not caught, he is in position to score.

The same generally holds true if any of the infielders go back after a fly ball. There is an exception when the infielder has turned his back to the infield and is running out on an attempted catch; if he makes it, he will have to come to a stop and turn in order to throw to home plate. The runner should then touch up. He may have a good chance to score.

When First and Third Bases Are Occupied

If the infield is playing for the double play with none out, the runner on third base should attempt to score on any ground ball hit to an infielder. If the ball is hit directly to the pitcher, the runner attempts to score only if the pitcher throws to second base for the force-out. Should the defense throw to home plate instead of second base in ample time to make a play on the runner from third, he should hold up and get in a rundown, giving the runner on first base an opportunity to advance to third if possible.

The runner on third base plays all fly balls the same (see above), independent of other base runners. The runner on first base touches up and attempts to advance if the throw goes to home plate after the catch. On a short fly ball that should be easily handled, the runner on first takes his lead in the same manner as when first base only is occupied. There ordinarily will be no play at home plate. Whoever catches the ball will run toward second base, watching the runner on third base.

When Second and Third Bases Are Occupied

With no outs, if the infield is playing close and two runs are needed to tie the score, the runner on third base should hold up on a ground ball hit hard at any infielder. If the ball is hit to either side of any infielder, so that he is not in good throwing position, the attempt to score may be made. With one out and the tying or winning run on third base, the runner on third should attempt to score except when the ball is hit directly at the third baseman, pitcher, or first baseman. When the infield plays normal depth, the attempt to score should be made on all ground balls except one hit directly at the pitcher.

TYPES OF STEALS

Steals are typed as (1) single steals or (2) double steals and are either straight or delayed.

On the straight single steal, the base runner starts his advance with the first move of the pitcher to deliver to the plate, or if the pitcher delivers on a count, just one count before the move to actually pitch. Starting one count ahead gives the runner a good jump on the pitcher.

On the straight double steal, two runners attempt to advance with the first move of the pitcher to deliver to the plate.

On the single delayed steal, the base runner delays his start until after the pitch has been made. On the double delayed steal, one or both runners delay until after the pitcher has delivered the ball.

The Straight Single Steal of Second Base

The base runner takes a slightly longer lead than normal. If he knows the pitcher's initial move (see Ch. 3, The Pitcher and Pitching, Initial Moves) he tries to start toward second base at the instant the pitcher makes the move. He should not attempt to steal if he is leaning toward first base as the pitch is made, since he will be losing a step on his start.

As he starts his run, his first step can be a cross-over in which he pivots on his right foot and steps across with his left foot. Or he can start by pivoting on his left foot and stepping out with his right. The base runner should use the movement most natural for him.

As the runner runs to second base, he should not look for the ball, but should keep his eyes on the fielder covering the base. The fielder will reach for the ball and in this way tell the runner which way to slide. The runner slides away from the fielder's reach for the ball. When the base runner steals on a count, his lead need only be normal. He starts for second base one count before the pitcher delivers to the batter. If the pitcher throws to first base instead, the runner should continue on to second. He has a good start and an accurate throw from first to second base is required to get him.

The Delayed Single Steal of Second Base

Only a fast runner should attempt this delayed steal.

It is used if the catcher has been lobbing the ball back to the pitcher and the second baseman and shortstop are playing deep, neither going in to cover the base as the ball is returned to the pitcher. The base runner starts just as the catcher starts his throw to the pitcher. The pitcher must catch the ball, pivot, and throw while the baseman who covers must come from his deep position to make the play.

The Steal of Third Base

Stealing third base should normally be attempted with a right-handed hitter at the plate, so that the catcher will be forced to shift around the batter or throw over him.

At the same time the runner is able to get a longer lead off this base, since the second baseman and shortstop usually do not hold the runner as close to the bag as does the first baseman. The runner keeps his eyes on the pitcher and listens for instructions from the third base coach. He gets his maximum lead. If the coach sees the second baseman or shortstop break in for a play, he instructs the runner to get back. The runner then goes back to a point where he can safely return to the base, should the pitcher pivot to throw. When the runner is driven back in this manner, the opposition obviously is alerted, and the steal should not be attempted on the next pitch.

When he is not driven back from his maximum lead, the runner starts as the pitcher makes his delivery to the plate. If the pitcher is delivering on a count, the runner may start one count before delivery. In this case he does not need quite as long a lead.

On a delayed steal, the runner takes his normal lead, and then a couple of additional steps as the pitcher delivers the ball. He attempts to draw a throw from the catcher to second base. As the catcher brings him arm back to throw to second, the runner advances. This should be attempted by only a fast runner and against a catcher who will throw.

The Steal of Home

A steal of home should be attempted only if the pitcher is careless on his windup. It is a good plan to make a break or two, faking a steal on previous pitches, before going through with the play. The fake is made by the runner starting for home with the first move of the pitcher's windup. He stops as the pitcher's arm starts forward in delivery, then hustles back to the base. He should glance over his shoulder as he goes back; he might be able to score if the ball should get away from the catcher. When the steal is to be executed, the start is the same as on a fake.

The Double Steal With First and Second Bases Occupied

The runner on first base must watch the runner on second. As the runner on second base starts his steal, the runner on

first starts. He must hustle, since he gets a later start, and an alert catcher will throw to second if he feels he has no play at third base.

The Double Steal With First and Third Bases Occupied

On this steal, the runner on first base starts as the pitcher delivers to the plate. He goes through with the play if he can make a clean steal. He holds up if the throw beats him to second base. The runner on third holds until he sees the ball on its way to second. If the runner on first base should be picked off, the runner on third base should start for home just as the throw from the first baseman goes to second. The fielder fielding the ball on the second base side of the rundown must make a half turn and has a longer throw to make to home than the fielder at first base.

If the offensive team is runs ahead and the runner on first base is fast, the runner on third should hold up, since the catcher may not make the throw to second.

For the delayed steal in the same situation, the runner on first base does not start until the catcher starts his throw to the pitcher. The runner on third base should not start unless the pitcher throws to second base. The play can be used only when the infielders do not throw well and the base runners are fast.

A timed steal can be effective against an inexperienced left-handed pitcher. As the pitcher steps into the set position, the runner on first base starts for second. Usually the pitcher throws to first base as the runner starts, and if the runner on third base is alert, and starts at the same time, he will have a good chance to score.

The Triple Steal

On the triple steal, all three bases are occupied. The runner on third takes the lead, the other runners following.

WHEN TO STEAL

Second Base

The best time to attempt to steal second is with one or two outs. It should not, however, be made with two outs and a

poor hitter at bat; if the runner is thrown out, the next inning will start with the poor hitter. It should not be attempted if the offensive team is runs behind.

Third Base

A steal of third base ordinarily should not be attempted with no outs. The best time to steal is with one out, provided a right-hand hitter is at bat. The runner can then score on an error, a ground ball, a fly ball to the outfield, or a squeeze play. Any time the runner is certain, however, that he can safely steal third base he should do so regardless of the outs. The batter can aid the runner by faking a bunt and drawing the third baseman in for a possible play.

Home Plate

A steal of home plate ordinarily should not be attempted if the offensive team is runs behind, when two strikes are called on the batter, if a good hitter is at bat, or if there are no outs. The runner should be fast and have the ability to get a good start.

The Double Steal

The best time to play the double steal with first and second bases occupied is with one out. The offensive team should not be more than two runs behind. The hitter at bat should be a good hitter, or should be followed by a good hitter. If the play is successful, the double play situation is eliminated and both runners are in scoring position. The runner on second base should be a good base runner, since he leads the play.

When the offensive team is runs ahead, more chances can be taken; this is true, of course, of all base-stealing situations.

The logical time to play the double steal with first and third bases occupied is with two outs, not more than two runs behind, and a good hitter at bat. If the play is successfully executed, the tying run is in scoring position. It may be played with one out and a weak hitter at bat, followed by a

strong hitter. It will prevent the poor batter from hitting into a double play.

The Triple Steal

The triple steal should seldom be attempted, and only if the pitcher takes a long windup and is not alert. The runner on third base should be fast, and at least the tying run. It should normally be tried in the late innings of the game and there should be at least one out.

A RUNNER CAUGHT BETWEEN BASES

When a runner is caught off a base or between bases, he should advance toward the next base as quickly as possible, forcing a throw to the advance base. If the throw beats the runner in ample time, he should hold up and then jockey back and forth. If another runner follows him, this gives that runner a chance to advance. At the same time, if the caught runner can force the defense to toss the ball back and forth, they may make a bad throw, thus permitting him to advance a base or return to the base he left.

When a situation arises where a succeeding runner has advanced to the base which was occupied by a preceding runner, the second runner should stay on that base until the runner who originally occupied it returns safely. Only then should he attempt to go back. Inexperienced runners often leave the base too soon. The defense may then not only tag the runner caught off base, but may also make a play on the runner who advanced and is attempting to get back. If both runners occupy the same base, the runner originally occupying the base is safe, the runner who advanced to the base is out. He must, however, be tagged with the ball.

SLIDING

There are three reasons for sliding into a base: (1) to avoid being tagged by a defensive player; (2) to stop the momentum of the player going into the bag; (3) to avoid a collision with a defensive player. In a given situation, a player may slide for any one of these reasons, or a combination of them.

The Fall

The player learning to slide must first develop the ability to fall in a relaxed manner. The method which follows is generally effective in developing the feet-first slide.

The player stands upright. He then shifts all his weight to the left foot, which should be his take-off foot, bending his left knee slightly. He raises his right foot off the ground, bending the right knee so that the right ankle is inside of and extended beyond the back of the calf of the left leg, keeping the right knee pointed directly forward (Fig. 134). He then bends forward at the waist, bends the left knee and falls on his left side, taking the shock of the fall on the outside of his left leg and thigh. The palm of the left hand is turned down as he falls, further shock being taken by the hand. The right arm is swung sideward and upward to maintain balance (Fig. 135).



Fig. 134.—The initial position in learning to fall for a feet-first slide.

Fig. 135.—The fall.

The fall is executed on the right side simply by reversing the procedure. After confidence is gained in falling from a standing position, the player walks and then falls left and

right. He should get in the habit as he falls of raising the top foot and leg well off the ground, since this is the foot with which he will later contact the base. Forming the habit of raising this foot also will eliminate the possibility of catching the spikes of the shoe in the ground.

The player should gradually increase his speed in practice until he is running at full speed as he goes into his fall for the slide. This practice will teach him to take off on one foot and slide on the opposite side, as in the hook slide.

The player should also practice falling on the opposite side to his take-off foot. He again stands upright, then bends the left knee, and raises the right foot off the ground, bending the right knee as above. The weight is shifted forward and to the right. The left knee is bent further and the fall is made to the right side, raising the left leg and foot well off of the ground. The initial shock of the fall is taken on the right foreleg, then on the thigh and upper leg. The palm of the right hand is turned down and placed on the ground, the left arm thrown upward to maintain balance.

The fall to the left side is made by reversing the procedure.

The player should again go into a walk and fall and gradually increase speed until he is running full speed when he falls.

This fall is recommended in learning the straight-in and bent-leg slides.

The Straight-In Slide

There are three types of feet-first slides—this is the basic one. It is used to get to a base as quickly as possible. The runner keeps his eyes on the base as he approaches it. If he slides on his left side, he should try to take off on the left foot, and if he slides on his right side, he should try to take off on his right foot. Some players, however, always take off on their dominant foot, regardless of the side on which they slide. When sliding on the side opposite the take-off foot, the shock of the fall will be heavier on the leg on which the player falls. With practice he soon compensates for this

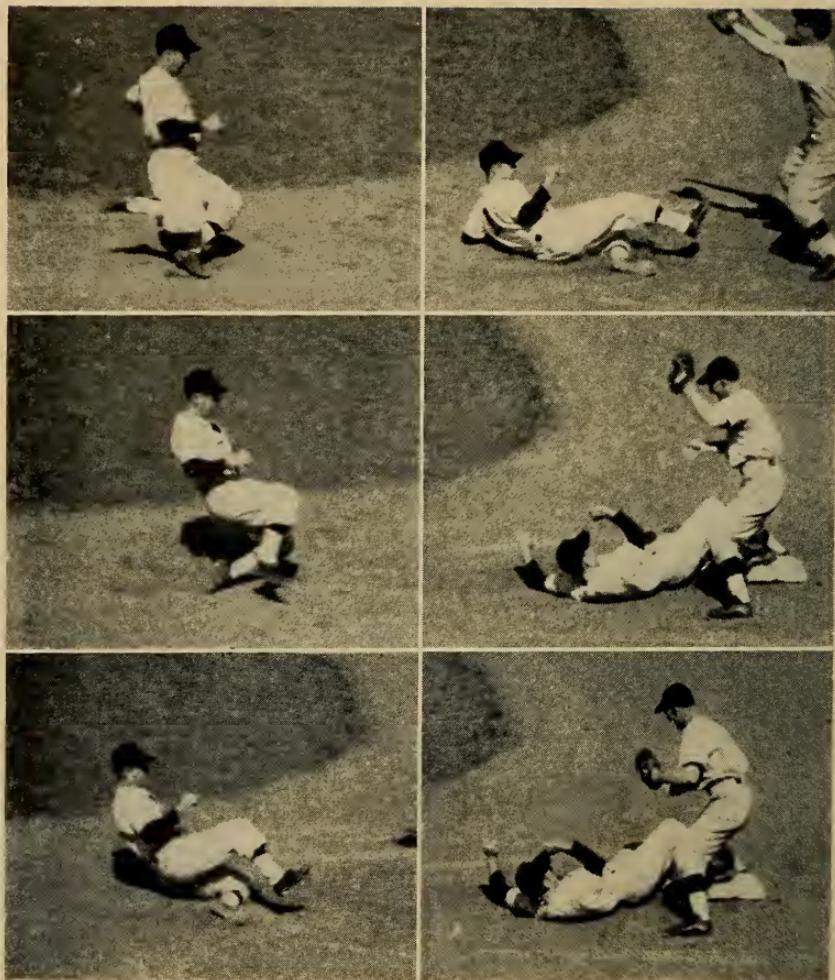


Fig. 136.—The straight-in slide.

by throwing the weight of his body farther backwards as he takes off, thus reducing the shock.

In taking off, the knee of the leg on which the slide is made is well bent under; the instep of the foot is facing in the direction of the slide so the spikes will not catch in the ground. The upper leg is raised well off the ground, knee bent, the foot well off the ground. As the slide is made, this foot reaches for the near edge of the base. The upper part of the body is thrown backward as the take-off is made, the thigh and upper leg taking most of the shock of the fall. As contact with the ground is made by the thigh and leg, the palm of the hand on the same side is brought down to take some of the impact. The opposite hand is thrown sideward and upward to maintain body balance (Fig. 136). When a double play is being attempted, the runner can at times hook the striding foot of the defensive player with the instep of his upper foot and interfere with the completion of the double play.

The Bent-Leg Slide

The bent-leg slide on the left side, straight into the base, is effective when the ball gets away from the baseman covering because the base runner can readily come to his feet and continue on to the next base.

The take-off is closer to the base than the straight-in slide. The knee of the left leg is bent well under, the instep of the left foot turned so it is facing the direction of the slide, so that the spikes will not catch in the ground. The extended right leg is raised well off the ground and bent at the knee. The body is more erect, the weight being thrown forward. The initial shock of the fall is taken by the outside of the fore-leg. As the slide is made, the right leg remains bent until the right foot contacts the base. The left hand is placed on the ground, palm down. As the right foot contacts the base, the bent right leg braces. At the same time the runner rolls inward on his left knee, pushing off the left hand and to an upright position. He can now continue on his run to the next base (Fig. 137).

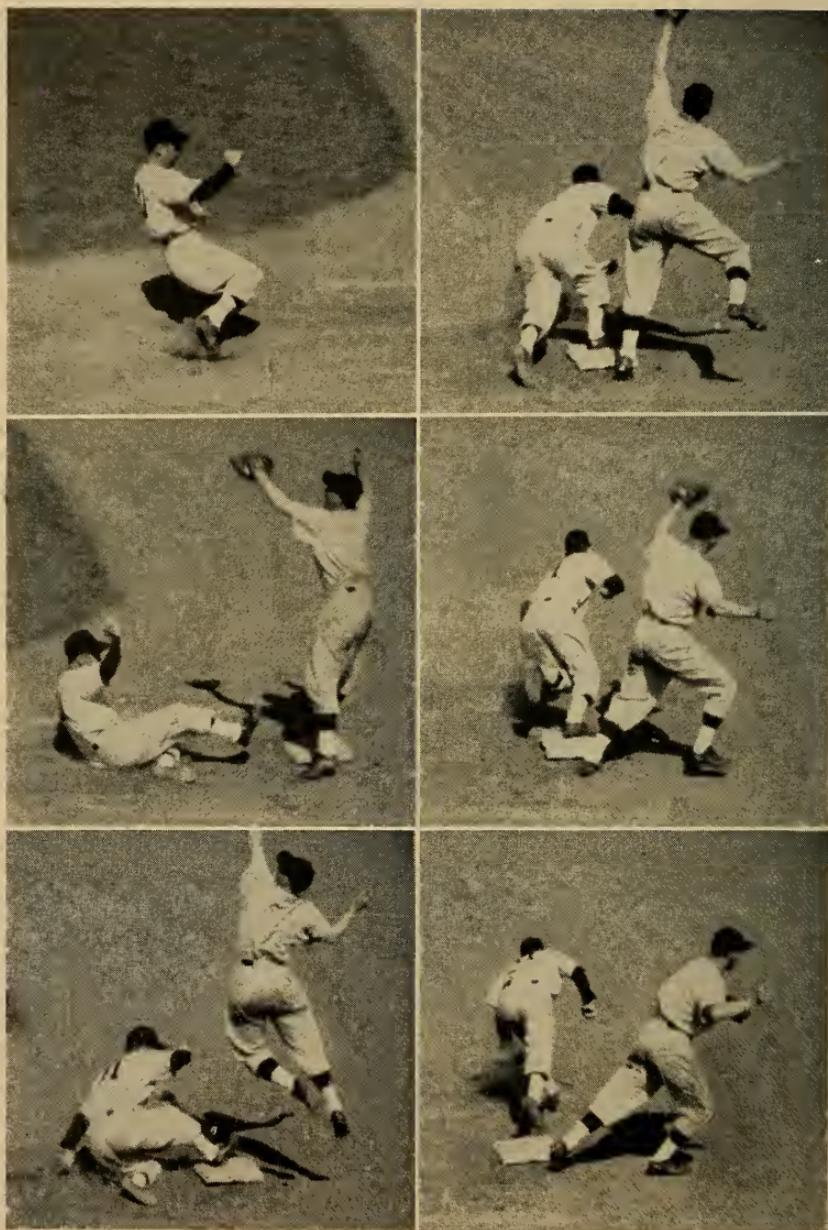


Fig. 137.—The bent-leg slide.

The take-off normally should be off the left foot when sliding on the left side. If the player cannot do so naturally, he will, with practice, soon compensate and make the proper adjustments even though taking off of his right foot.

The runner may also use this slide to interfere with the completion of a double play by hooking the instep of his upper foot on the striding foot of the baseman making the pivot throw. The hook is made by turning the instep of the upper foot toward the striding foot of the baseman and sliding into the striding foot. If the baseman strides to the infield side of the base as he makes his throw, the runner should slide on his right side, hooking with his left foot; if the baseman strides to the outfield side of the base, the runner should slide on his left side, hooking with his right foot. It should be understood, however, that the runner cannot legally leave the course of his run to interfere with play.

The bent-leg slide may also be used to avoid being tagged by a baseman. In this case, the runner approaches the side of base away from the reach of the player catching the ball. The under leg is bent well under, while the upper leg is raised off the ground. As the base is approached, the foot of the upper leg reaches sideward for the near corner of the base.

The Hook Slide

The hook slide is used by a runner primarily to avoid being tagged by a fielder. On this slide, the runner watches the hands of the baseman, sliding away from his reaching motion. In Fig. 138, the runner has taken off on his left foot, sliding to his left, since the baseman is reaching to his own left astraddle the bag, leaving only the front corner open. Both feet of the runner are turned sideways to avoid catching the spikes in the ground, both knees are bent, the right more than the left, the weight of the upper part of the body being thrown left and backward. As he slides, the left foot is brought forward and away from the base, the right leg bent and dragging, the right foot turned so the instep faces the base. The toes of the right foot hook the near side of the base. As he

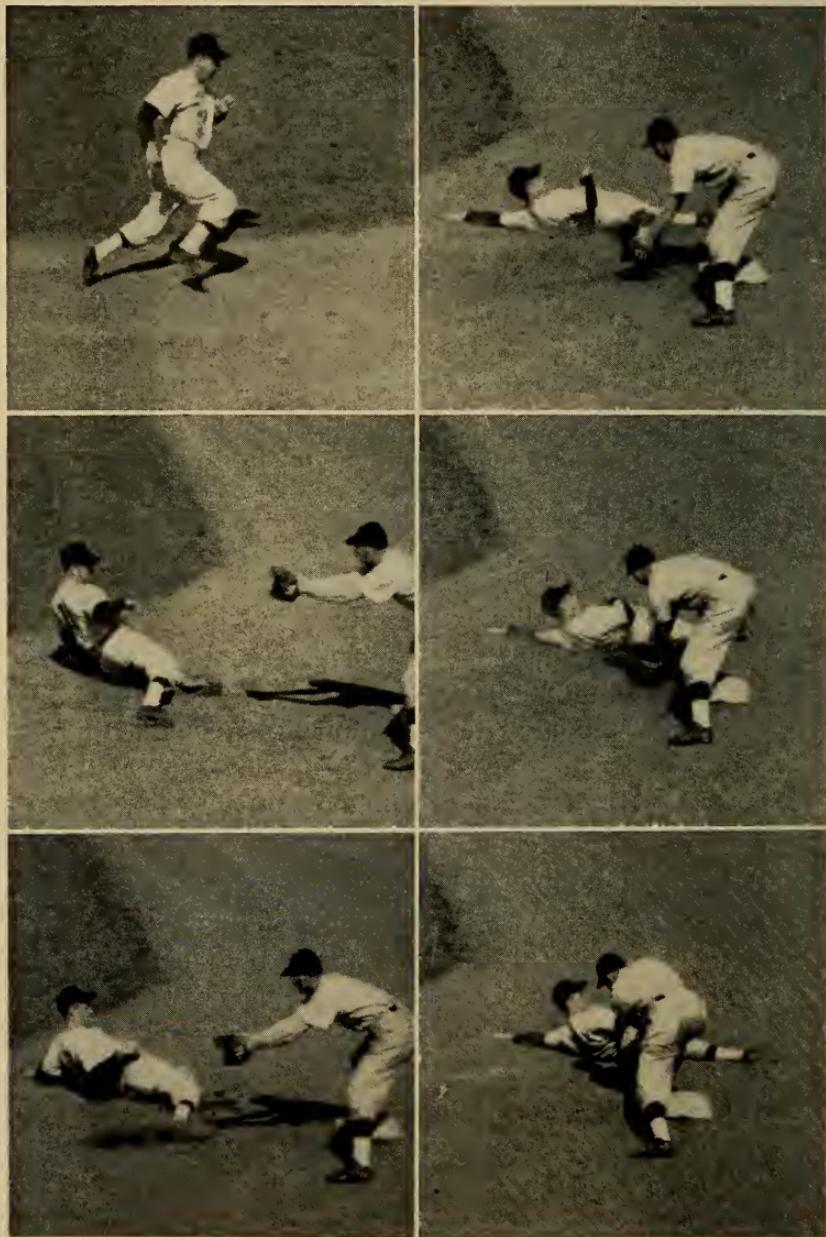


Fig. 138.—The hook slide taking off on the left foot and sliding left.

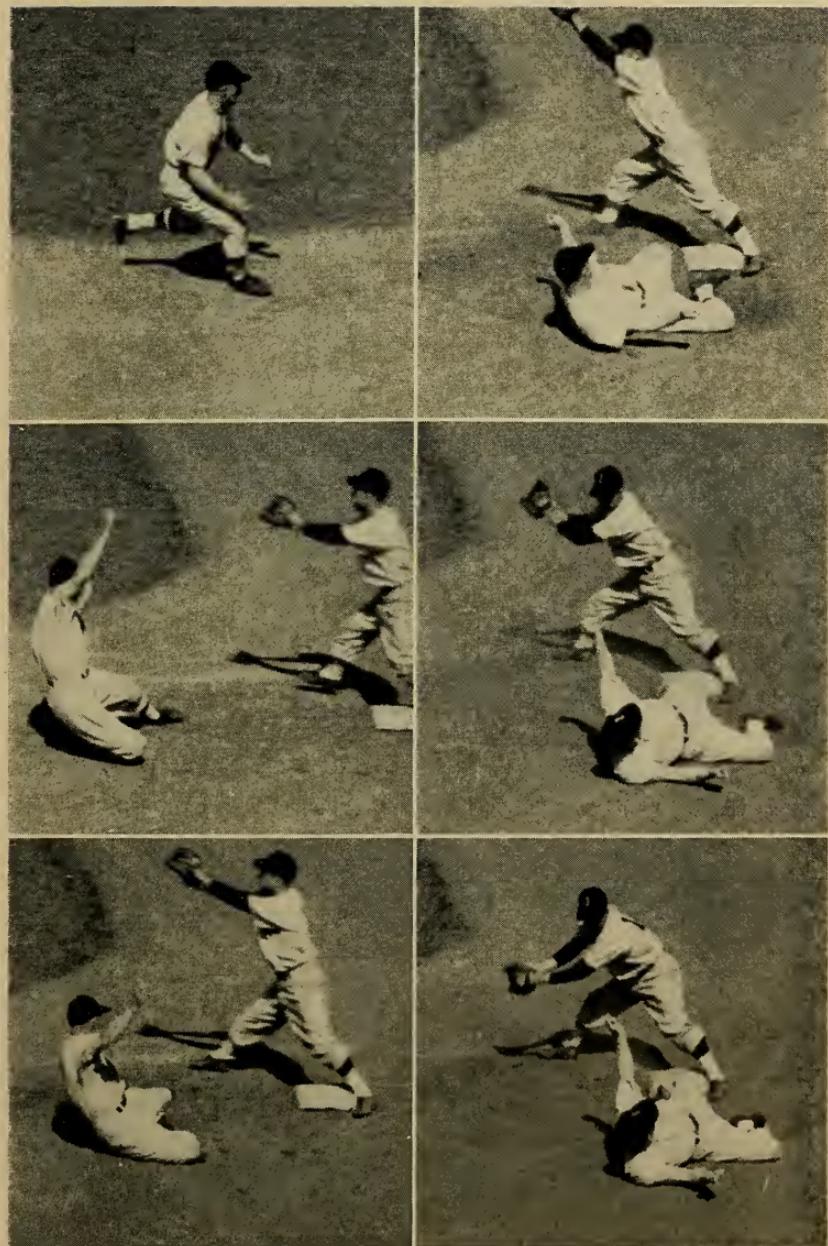


Fig. 139.—The hook slide taking off on the right foot and sliding right.

slides, the left hand is placed on the ground, palm down, to absorb some of the shock while the right arm is pulled close to the body so as not to offer a tagging target, but still helping to maintain balance and carry the upper body away from the baseman. Most of the shock of the slide, however, is taken by thigh and leg.

In Fig. 139, the runner is sliding to his right and has taken off on his right foot. The right knee is well bent, the left knee not as much, the instep of the right foot facing the base. The weight of the body is to his right and backward. As the slide continues, both arms are thrown upward and the body weight backward. The right foot swings forward while the left contacts and hooks the near corner of the base. By bending both knees and turning the insteps of both feet toward the base as the slide is made, the runner again eliminates the possibility of catching the spikes in the ground.

The Whip Slide

As a player becomes proficient at the hook slide, he can develop a whip slide which may be used when the baseman is waiting with the ball. This is definitely on the tricky side and calls for good coordination.

The slide starts closer to the base and is started the same as the hook slide. However, the player slides farther to the side of the base and, after he makes contact with the ground, kicks both legs forward and away from the base. The near arm reaches for the base, offering a tagging target to the baseman. Just before the baseman can make the tag, the runner whips the near arm back and away, turning the body in. The far arm is brought in and over, reaching for the near back corner of the base. The baseman must follow the slide and has only the arm or hand to tag (Fig. 140).

The Head-First Slide

The head-first slide should be used only when a player is caught off balance and must dive to get back to a base, or in a case where he has some injury which might be aggravated



Fig. 140.—The whip slide.

by sliding feet first. Using this slide permits a runner to be more easily blocked off and tagged, and the possibility of injury through bodily contact also is greater.

The slide is made on the front part of the body by springing off the feet, throwing the body forward, extending the arms and reaching for the bag. As the player dives, the initial contact is made by the hands, followed by contact by the body (Fig. 141).



Fig. 141.—The head first slide.

POINTS TO REMEMBER

A runner should always remember to carry through on his slide once he is committed. Because of lack of balance, sprains and breaks will occur if the player decides to slide and then changes his mind.

On a straight-in slide, concentrate on watching the base, while on a hook slide concentrate mainly on the hands of the fielder.

If the throw is coming from behind the runner, he should watch the fielder's hands. If the fielder reaches to either side, the runner should slide to the opposite side. If the fielder

reaches directly toward the runner, he should slide directly toward the fielder. This will sometimes interfere with the catch.

On all force plays the runner should slide directly into the base. When a runner has been forced out and a double play is in order, the runner should slide and attempt to make contact with the baseman covering in the hope he can interfere with the completion of the double play. As previously stated, hooking the striding foot of the defensive player is the best way to do this.

Experienced players will often roll into the defensive player or slide high into him with the spikes of the upper foot. To avoid injury, the roll and spikes-high slide should not be attempted by inexperienced players.

Normally, a batter-runner should slide into first base only to avoid a collision on a close play, or when the throw is to the plate side of first base, pulling the first baseman off so he must tag the runner. The runner may then be able to avoid a tag. Occasionally, however, a batter-runner may gain a close decision by using a straight-in slide to first base.

CHAPTER 15

GENERAL OFFENSIVE PLAY

The basic function of offensive play, of course, is to score runs—and win ball games. The following material deals with typical play situations and is a general guide to strategy.

Factors involved that must be kept in mind, in all situations and at all times, are the score, the inning, the number of outs, the strength and weakness of the defensive team, the strength and weakness of the offensive team, and the call on the batter. The difference between winning and losing often lies in a player's—or coach's—simply keeping informed on the state of the ball game.

The first batter in each inning can often judge the speed of the pitch and follow the ball better if he will stand close to, or in, the batter's box as the pitcher takes his warm-up throws, trying to follow the ball as it leaves the pitcher's hand until it passes through the home plate area.

SITUATIONS AND STRATEGY

1. With No One on Base

a. *No outs, score close.* Normally the batter should take a strike. There are few batters who can hit the first pitch well, and if the pitch is a ball, the batter not only has had a chance to look at a pitch, but also has an advantage over the pitcher. With the call one, two, or three balls and no strikes, the batter should take.

b. *One out, score close.* If the batter is a good hitter, he should hit; that is, be ready to hit up to the call of two balls

and no strikes. He may hit for extra bases and will then be in scoring position. A good hitter may hit with the call three balls and one strike, but a weak hitter should take the next pitch.

c. *No outs, score close.* The same principle applies, depending on the type of hitter at bat.

2. With First Base Occupied

a. *Score close, no one out.* If the batter is a weak hitter the sacrifice bunt can be used to advance the runner. A good hitter should hit or should play the hit and run, particularly if the call on the batter is two balls and no strikes, two balls and one strike, or three balls and one strike. Normally the pitcher will make every attempt to deliver the ball through the strike zone. If the hit-and-run is played after a three ball and one strike call and the pitch is a ball, the batter should not attempt to hit, since both batter and runner advance on the fourth called ball.

In the latter part of the game where one run is very important, the sacrifice bunt should be used, if the next succeeding batter is a strong hitter.

b. *Score close, one out.* If the batter is a good hitter and the pitcher has good control, the batter should hit up to the call of three balls and one strike. If the next hitter is a strong hitter the batter at bat may take the next pitch.

3. With First and Second Bases Occupied

a. *No one out, score close.* In the early innings, strong hitters should attempt to hit. In the latter part of the game, the runners should be bunted to second and third bases, provided the next batter is a strong hitter. If the offensive team is runs ahead, all except weak hitters should attempt to hit.

b. *One or two outs, score close.* All batters should attempt to hit, unless there is a strong possibility of a base on balls.

4. With First and Third Bases Occupied

a. *Score close.* Regardless of the number of outs, all batters should attempt to hit except in the ninth inning, one out, the tying or winning run on third base. If the batter is a weak

hitter but a reasonably good bunter, the squeeze play can be played unless there is a good chance for a base on balls.

5. With Second Base Occupied

a. *Score close, no outs.* All batters should attempt to hit in the early part of the game. In the latter part of the game, if one run is needed to tie the score or put the offensive team a run ahead, and the batter is a weak hitter, the runner may be bunted to third base, thus giving the next two batters an opportunity to drive in the run.

b. *Score close, one out.* All batters should attempt to hit.

6. With Third Base Occupied

All batters should attempt to hit in the early part of the game. With one out in the latter innings and the run critical, a weak hitter may play the squeeze play.

7. With Second and Third Bases Occupied

a. *Score close.* All batters should attempt to hit. A good batter should hit with the call three balls and one strike, particularly if the next batter is a weak hitter.

8. With All Bases Occupied

Regardless of outs, good batters should hit away unless there is a good chance of a base on balls.

9. Batting According to the Score

Whenever the offensive team is runs ahead, all batters should try to hit. When runs behind, the offensive team should wait out the pitcher if he has control trouble or shows signs of tiring.

10. When to Sacrifice

The sacrifice bunt is used with no outs, the score close and first base, or first and second bases, occupied; or, as mentioned above, the last part of the game if there is a runner on second. The bunt should not be called when runs behind, unless the tying run can be moved into scoring position. If second base is occupied and the batter is a weak hitter who

is followed by a strong hitter, the runner may be bunted to third base. He can then score on a long fly, error, or base hit.

11. When to Play the Hit-and-Run

The hit-and-run play is played with one or no outs, the score close, or the team at bat runs ahead. The batter should be ahead of the pitcher on the call; if the pitcher has good control, the batter can hit the first pitch after a walk, since the pitcher will normally try to deliver this pitch through the strike zone.

a. *With first base occupied.* The play is played on signal, to make certain both batter and runner understand. The runner on first base starts for second base as soon as he is certain the pitcher's delivery is to the batter. The batter attempts to hit the ball on the ground and through the infield. If possible, he should hit through either the second base or shortstop position, depending on which infielder is covering second base. Some teams have the second baseman cover second base if a right-handed batter is at bat, and the shortstop if a left-handed batter is at the plate.

Because he breaks with the pitch, it is very difficult to get the runner going to second base, except when the ball is hit hard to the second base side of either the shortstop or second baseman. A runner can often go from first base to third base on this play, particularly if the ball is hit to right field.

b. *With first and second bases occupied.* The hit-and-run play is sometimes used with only a fair hitter at bat. The batter knows he will attempt to hit the next pitch and sets himself to do so. Once again, if the ball is hit on the ground, even though fielded cleanly, it will be very difficult to get a double play. The first baseman does not hold the runner on first base, giving him a longer lead, while the third baseman is forced to cover third base, leaving an opening through his territory.

If, however, the batter is a good hitter, it is better to play for a base hit.

c. *With first and third bases occupied.* The hit-and-run may be played particularly in a situation where the call on the batter is three balls and a strike, or three balls and two strikes. If the pitch is wide of the plate, the batter does not offer at the pitch on the three and two count.

The runner on first base starts running with the first move of the pitcher's delivery to the batter. The runner on third base holds up until he sees where the ball is hit. With nobody out and the defense in, the runner on third base holds up until he sees the ball will go through the infield, or an error is made.

With one out, the runner on third base attempts to score on all ground balls except one hit directly at the pitcher. If the pitcher makes his throw to second base for a force-out, the runner on third base attempts to score. An exception to this would be the last inning with the winning or tying run on third base. Then if the infield is close and the ball is hit sharply at the pitcher, third baseman, or first baseman, the defense will play the runner on third base, if he breaks. If, however, the throw goes to second base for a force play, the attempt to score should be made.

If the infield is playing back or in the double play position, the runner on third base should attempt to score except when the ball is hit sharply at the pitcher.

On all hit-and-run plays it is best to be ahead of the pitcher; that is, two balls and no strikes, two balls and one strike, etc. Under these conditions the pitcher will normally attempt to deliver the ball through the strike zone. If the pitcher has been getting the first pitch over the plate consistently, the hit-and-run may be played on the first pitch.

12. When to Play the Squeeze Play

There are two types of squeeze play—the straight squeeze play, and the safety squeeze play.

a. *The Straight Single Squeeze Play*

This play is usually called in the late innings, with one out and a runner on third who can score the tying or winning run.

A weak hitting team may play it any time, provided it is not runs behind. A prearranged signal is given so that both the batter and runner on third base know the play is on. With the first move on the pitcher's windup, the runner on third base starts for home plate. The batter must make every effort to bunt the ball on the ground and if he does so, this type of squeeze play will be successful regardless of how the defense plays its infield. If the pitcher takes the set position, however, it is not advisable to play the straight squeeze.

b. The Safety Squeeze Play

On the safety squeeze play, the batter attempts to bunt a pitch that is through the strike zone, and the runner on third base attempts to score only after it is bunted. The runner should be fast and the batter a good bunter. A signal need not be given, though the runner should be aware that the batter may bunt any pitch with less than two strikes called.

Should the third baseman and first baseman play deep, the setup is good for a safety squeeze regardless of the speed of the runner, the batter attempting to bunt the ball down the third base or first base line.

c. The Straight Double Squeeze Play

On the straight double squeeze play, both second and third bases are occupied and an attempt is made to score both runners with a bunt.

It is played the same as the straight single squeeze. The pitcher must be using his normal windup. The runner on second base should be reasonably fast. The runners start to advance with the first move of the pitcher's delivery to home plate. The runner from second base continues on to home plate, provided he has rounded third base at the time the ball is fielded. If he has not done so, he should hold up at third base.

Should the fielder of the bunted ball fake a throw to first base, then play the runner who has rounded third base, this runner should hold up and deliberately get caught in a rundown to give the batter-runner a chance to reach second base.

This play can be used when the score is close, the batter a good bunter, and the winning or tying run on second base. It is usually played with a right-handed hitter and with one out.

13. The Bunt-and-Run

The bunt-and-run is played with a fast runner on first base. Basically, the play is the same as the hit-and-run. The batter should try to make the third baseman field the ball so that the runner on first base may have an opportunity to go all the way to third.

The runner on first base starts with the first move of the pitcher to deliver to the batter. He makes his turn at second, continuing on to third as the third baseman fields the ball and throws to first. If the pitch is missed by the batter, the runner goes into second as if the play were a clean steal.

When the ball is bunted to the third baseman, the runner making the turn at second base must be careful of a fake throw to first base, followed by a throw to second.

14. The Steal-and-Hit

On the steal-and-hit, the runner attempts to get the jump on the pitcher, as in a clean steal. If the pitch is a good pitch, the batter hits. A good time to play the steal-and-hit is with one out, score close, and the call two balls and no strikes.

POINTS TO REMEMBER

The next batter up should help not only himself, but also his teammates. He can encourage the batter by "talking it up." If the batter misses the third strike, he should tell him to run.

If a base runner is attempting to score, the player waiting his turn at bat should help him by removing the bat or catcher's mask if they are in the line of play. He acts as a coach at home plate. He should take a position fairly close to home plate and in line with the third base line, so he can be seen by the runner and will not interfere with the play. He

should use the same signals to slide, hold up, and hurry as are used by the coach at third base. He also should warn any runners on base if he sees a tip-off for a pick-off throw from either the catcher or pitcher.

When the batter is ahead of the pitcher, a fake bunt or swing will help prevent the pitcher from easing the ball over the plate for a strike.

When a runner is attempting to steal a base, the fake bunt will sometimes pull a defensive player out of position, and may also bother a catcher making a throw to a base.

All offensive players should run hard on every play. The defensive team may make a mistake that enables the runner to take an extra base.

The offensive team should watch the second baseman and shortstop when there is a runner on first base. They will often tip off who is to cover second. The man who does cover in turn will often tip off where the throw is going by reaching for the ball too soon. The slide should be away from the direction of the infielder's reach.

OFFENSIVE DRILLS

As each player takes his turn in batting practice, he should practice the hit, sacrifice bunt, hit-and-run, and, if it is used by the team, the straight squeeze. At least three straight-away hits and one of each of the other plays should be attempted.

When only two or three games are played during the week, it is advisable to have at least one practice where a defensive team is set up, runners are placed on the bases, and all offensive plays are executed. As each batter completes his turn at bat, he becomes a base runner.

Should the squad be small, it may be necessary to have only three or four batters, placing the other players on the defense, alternating them as soon as a player has completed his base running. A coach should be stationed at third base so the players learn to take instructions from him; close games are often won or lost in the coach's box.

1. Bunting Drills

Practice drills for bunting can be set up by drawing a circle close to the first base line and another close to the third base line, twenty to thirty feet from home plate. Each batter should attempt to bunt the ball into either circle, depending on whether it is an outside or inside pitch. If hitting areas are available off the regular diamond, this drill may be practiced by placing the circles in the same approximate positions as on a regular diamond.

If the drag and push bunts are used, a marker can be set approximately eighty feet from home plate and at a point that would be half way between the pitcher's box and first base. The batters should attempt to push or drag the ball hard enough and accurately enough so that it will roll to the marker.

2. Base Running Drills

It is advisable to have defensive infielders take their positions in all base running drills. If the drill is on stealing second base, the first baseman holds the runner on first base, the second baseman and shortstop assume their regular positions so that they will learn how far from the base they can be and still cover after the ball passes the batter. A batter should take his position in the batter's box, first as a right-handed batter, then as a left-handed batter. The catcher will then become accustomed to making his throws under game conditions. He should wear all of his equipment for the same reason.

A base runner is now used for demonstration purposes. He attempts to pick up the pitcher's move so he will be able to get a good start on the pitch. If the base runner does not know the pitcher's move, the coach should instruct him on what it is. All other players who are to take part in the drill should listen to these instructions, placing themselves in foul territory behind first base, watching for the move. The pitcher should throw to first base several times to drive the runner back. He should also throw to the plate several times. The base runner and observing players can thus catch any variations in body movement which the pitcher has in his pitch to the plate, or in

his throw to first base. As soon as the pitcher's move has been analyzed, the base runner attempts his steal of second base. As he runs to the base he watches the hands of the player covering.

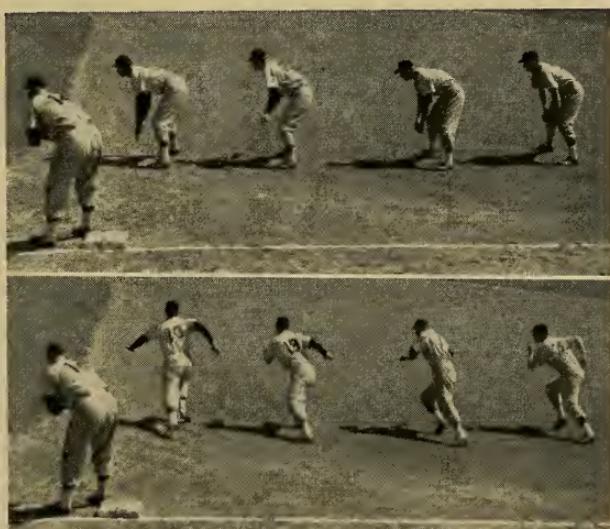


Fig. 142.—The lead and start in group base running.

A line is now drawn from second base toward the outfield in continuation of the base line from third base to second. Cross lines about a foot long are drawn seven to eight feet apart on this extended line. The same base runner again takes his position on first base while three or more other players align themselves on the first base foul line behind him, spacing themselves approximately the same distance apart. Each player keeps his left foot on the foul line until the pitcher assumes the set position. Then each takes his lead and, as the pitch is made to the plate, all runners start to steal second base (Fig. 142). The lead runner slides for the base, while the others slide for the cross line on their course. As soon as these runners have completed their turn, they re-mark the lines with their spikes for the next group of runners. The first group then returns to first base via the right field edge of the infield so that they will be out of the way of the next group.

When the first group again takes its turn, the lead runner takes his place at the end of the line, the second runner taking the lead position.

This method is a time saver, and at the same time competition is developed among the base runners, each trying to beat the other runners to second base. It should be understood that the players have already learned to slide before this drill is given; the additional practice, however, will help develop this skill.

A line is now drawn from second base toward the left field edge of the infield in continuation of the base line from first base to second base. The cross lines are also drawn. A right-handed batter should be in the batter's box. Group one now takes its lead off of second base. Group two assumes a lead off first base longer than before, since the first baseman now does not hold the runners on first. The base coaches assume their positions at first and third. The shortstop or second baseman stands at second base, the pitcher taking his set position. The runners all watch the pitcher, who should make several pivots and throws to second base. This will show each runner how far he can lead off second base and still be able to get back safely, when the pitcher pivots and throws. The shortstop and second baseman now assume their normal positions. As the pitcher takes his set position, the coaches advise the runners to "get off," "stay up," or "get back," depending on what the defensive players do. On the pitch to the plate, the runners should attempt to steal third base while the runners on first follow for a double steal. Each runner on first base watches the runner in his lane at second base, and advances when he advances. With a spacing of seven or eight feet between the runners in line at second, there is ample room for the shortstop to cut in for a pick-off, which should be tried from time to time.

Groups are placed at first and third bases. The first base foul line is extended beyond home plate, into foul territory. Another line into foul territory is extended in a continuation of the base line from second base to third base. The double steal is now executed with runners on first and third bases.

The catcher is advised to make his throw through to second base, the runners on third base attempting to score. The cutoff with the pitcher, the cutoff with the shortstop or second baseman, and the fake throw to second base by the catcher are also run through. After each play has been demonstrated, the defense should play one of the four possible plays. In this way all players have an opportunity to adjust themselves to the different play situations. It is important to advise the runners on third base not to break for home plate until they see the ball on its way to second.

Occasionally the runners going from first to second should "hold up" and be caught in a rundown, so that the runners on third will be able to judge just when they should make their break for home plate. The best time to make the break is when the ball goes from first base toward second base. This requires a longer throw to the plate, and the player receiving the ball has a harder pivot to make than the first baseman when attempting the throw to home.

Finally, it is worth remembering that on rainy days the coach can accomplish a great deal by chalk talks on offensive strategy.

PART III

MANAGEMENT

CHAPTER 16

DIRECTING TEAM PLAY

The head coach should control all offensive play in a ball game; the first and third base coaches assist him. Some authority may be delegated, with base coaches or competent players making some specific decisions, but the basic responsibility lies with the head coach. He is also responsible for control of the defensive play of his team, making defensive shifts when the pitcher or catcher does not do so, analyzing opposition weaknesses, and even calling specific pitches when necessary.

In the material that follows, the general mechanics of directing the offense are discussed in relation to the head coach. Separate sections on the first and third base coaches follow.

OFFENSIVE SIGNALS

Offensive signals are usually given by some position or movement of the body or part of the body. These actions should be natural, never forced or awkward. They should be given before each pitch to meet any defensive shift that may have been made. The constantly changing game situation—the score, the outs, the call on the batter, the weaknesses and strengths of both teams—also requires that the batter, base runners, and coaches be in constant communication. All members of the squad should know the complete signal system and practice until it becomes routine.

The following signals for offensive play may be given to the batter at various times:

1. The hit signal, meaning that he should hit the next pitch if it is to his liking.

2. The take signal, meaning that he is not to offer at the next pitch, even though it passes through the strike zone. A misunderstanding of the take signal will seldom work out as effectively as it did for the author on one occasion. The player involved was told to "take one" when his turn came at bat. He promptly clouted the first ball pitched to him for a triple. When he returned to the bench he was asked why he hadn't taken one.

"Well, coach, I did," he said, surprised. "Took it for three bases, didn't I?"

3. The hit-and-run signal, meaning the batter must attempt to hit the next pitch, even though it does not pass through the strike zone. The only exceptions are pitches delivered directly at the batter, or into the ground. If necessary, the batter should throw his bat at the ball in the attempt to hit it. It is also important that every effort be made to drive the ball on the ground. A fly ball might result in a double play, since the runner starts with the first move of the pitcher toward the plate.

4. The sacrifice bunt signal, meaning the batter bunts the ball only when the ball is delivered through the strike zone. The same signal can be used for the safety squeeze.

5. If the straight squeeze is used, a separate signal is given, the batter attempting to bunt the next pitch, even though it is not through the strike zone, unless it is directly at him or into the ground. The batter should hold his position until the ball has hit the ground and is in front of him. Doing this helps eliminate the possibility of bunting the ball into the air. Many inexperienced players will take a step forward as they attempt to bunt, with the result that they drop the bat and pop the ball into the air.

6. The steal signal, meaning the runner has the privilege of stealing on the next pitch, if he gets the jump. A change

in the call on the batter may change the steal situation so that it may not be logical to steal on a later pitch. There may be an exception with first and third bases occupied and a poor-throwing catcher on the defense. In this case the runner on first base should advance even though he does not get a good jump. Some teams have a double steal signal with runners on first and third bases, but this is not necessary. Ordinarily it is understood that the double steal is to be attempted when the steal signal is given, except when the coach advises the runner on third base to hold up. He usually does this by raising both hands, palms facing toward the runner.

Giving Signals

Special rules in college and high school baseball often do not permit the head coach to go to the coaching boxes at first or third base. Therefore, it is necessary for him to have a set of signals with the base line coaches informing them of the particular play he wants used. This also holds true in cases when a coach or manager prefers to give signals from the bench, even though he is permitted to be in the coaching boxes.

If the team at bat is occupying the bench or dugout on the first base side of the diamond, and the coach is on the bench, right-handed batters should take their signal directly from him. The batter should take an occasional glance at the coach as he approaches the batter's box, as he steps into the box, and as the pitcher takes his signal. This makes it more difficult for the opposition to know when the signal is given.

Left-handed batters take their signal from the coach in the third base coaching box. The head coach must give this coach the signal in ample time to relay it to the batter. When the team occupies the third base bench or dugout, left-handed batters get their signal directly from the coach, and right-handed batters from the first base coach.

After the first pitch the batter should take his signal as the catcher throws the ball back to the pitcher, or as the pitcher takes his signal from the catcher. When a batter misses a signal or is not certain of it, he should step out of the batter's box, in this way informing the coach he wants the signal again.

If a base runner does not know the signal, he informs the coach by stepping back on his base, calling time, and adjusting some part of his uniform. Should either base coach miss the signal, he should inform the head coach by calling time and asking the number of outs, the call on the batter, the score or some other question pertaining to the game. The batter or runners should take only a quick glance at the coach to receive the signal. Staring at the coach is a give-away that instructions are being sought.

Dugout and Bench Signals

If a team is sitting in a dugout which is below the level of the ground, signals should be given above the waist; if the bench is above the level of the ground, signals may be given either above or below the waist.

SAMPLE SIGNALS

The following signals are offered as a guide and may be used by the head coach as well as the base coaches. Since many teams have been successful with the straight squeeze, a signal for this play is given. The signal may be eliminated or used for another play, if the safety squeeze is used instead.

Cap Signals (Fig. 143)

1. The hit is always on, except when another signal in the series is given.
2. The take is on when the right hand touches the bill of the cap.
3. The sacrifice bunt is on when the left side of the cap is touched with the left hand.
4. The hit-and-run is on when the right side of the cap is touched with the right hand.
5. The steal is on when the front of the bill of the cap is touched with the left hand.
6. The straight squeeze is on when the front of the bill of the cap is touched with both hands. (If the safety squeeze is used, the signal for the sacrifice bunt can be used, eliminating the straight squeeze signal.)

A.



B.



C.



Fig. 143.—Cap signals:
A. Take.
B. Sacrifice.
C. Hit-and-run.
D. Steal.
E. Straight squeeze.

The base line coach gives the same signals but should give several other body movements as well so that the signals will not be easily picked up by the opposition. It is best to have either the first or second signal in a series be the play signal. The coach giving the signal must be alert to give the correct signal just as the player or players involved look at him. The signal should not be held but simply "flashed." The base line coach who is not involved should give a dummy signal, and if the signal is being taken from the bench, both base line coaches should give dummy signals.

It is standard practice that any signal which does not make sense in terms of the play situation is automatic permission to hit. For example, if there is no one on base, the squeeze signal may be given, but such a play would be impossible with no runners on base. The batter then has the privilege of hitting.

Face Signals

1. The hit is always on unless another signal in the series is given.
2. The take is on when the coach touches his mouth with his open right hand.
3. The sacrifice bunt is on when the coach touches the right side of his face with his open right hand.
4. The hit-and-run is on when he touches his closed right fist against the right side of his face.
5. The steal is on when he touches the left side of his face with his open left hand.
6. The straight squeeze is on when he brings both hands to his face—for instance, cupping his hands to his mouth and calling out advice.

The following signals are samples when the team is sitting on a bench above the level of the ground.

Knee Signals

1. The hit is on unless another signal in the series is given.
2. The take is on when the hands are placed on the knees.

3. The sacrifice bunt is on when the open left hand is placed over the left knee.
4. The hit-and-run is on when the closed fist of the left hand is placed on the left knee.
5. The steal is on when the open right hand is placed on the right knee.
6. The straight squeeze is on when both closed fists are placed on the knees.

In this series, if a base line coach relays the signals, he uses the belt instead of the knees.

1. The hit is always on unless another signal in the series is given.
2. The take is on when both hands touch the belt in front of the body.
3. The sacrifice is on when the left hand touches the belt on the left side.
4. The hit-and-run is on when the left hand touches the belt in front of the body.
5. The steal is on when the right hand touches the belt on the right side.
6. The straight squeeze is on when both hands are placed on the belt on the sides of his body.

The base line coach may also use the legs to give signals:

1. The hit is on unless another signal in the series is given.
2. The take is on when the coach faces the batter with the feet parallel.
3. The sacrifice is on when the left leg is forward and the body facing directly toward the batter.
4. The hit-and-run is on when the right leg is forward and the body is facing directly toward the batter.
5. The steal is on when the left leg is forward and the body is facing toward second base.
6. The straight squeeze is on when the right leg is forward and the body is facing toward second base.

Individual Signals

Providing the players have had enough playing experience, the hit-and-run and the straight squeeze may be played by the players themselves without a signal from the coach. The players must have the ability to bat and bunt for these particular plays, and must have the knowledge and experience to know when and under what conditions the plays should be attempted. The score, the inning, the number of outs, the call on the batter and the defensive ability of the opposition, particularly the pitcher's control, are deciding factors.

The hit-and-run may be played several times during a game and, to make it more difficult for the opposition to pick up the signal, each player should have his own signal which he gives to the three batters preceding him in the batting order. In turn he should be informed of the signal used by the three following batters. A team signal should, however, be available so that in cases of substitution in the batting order the coach can give the signal if he wants the play attempted.

The player gives the signal as he steps into the batter's box or after he assumes his position in the box, whichever is decided on. The batter should always make several body movements, the actual signal being given in the series of movements. He should also glance at the coach as he gives the series so that the opposition will not know whether the runner or coach is giving it.

Some signals that may be used as the batter steps into the box are stepping in with the front foot first; rubbing the shirt or pants with the front hand as he steps in; touching the bill of the cap as he steps in.

Some signals that may be used after he assumes his position are tapping the plate with the bat; touching the face, ear, nose, or cap with the front hand; touching the belt with the front hand. A player who frequently plays the hit-and-run may have the play on all the time except when he rubs it off. He calls off the play by rubbing his shirt with his front hand, or by giving any other designated body movement.

As the batter gives the designated signal he should glance at the runner, who answers. If there is no answering signal,

the batter should step out of the box, indicating to the runner that he intends to put on a play.

The same type of signal may be given for the straight squeeze, but since this play is not used as frequently, a simple one for a right-handed batter to use is to look at the runner on third. The runner answers by looking away from the batter. When batters are giving their own hit-and-run and straight squeeze signals, they should execute different body movements each time they take their turn at bat, often giving the designated signals in situations where these plays are not warranted. This further helps disguise the signal when it is actually on.

DEFENSIVE SIGNALS

The coach should watch his infielders and outfielders to be certain they shift according to the hitter and the game situation.

The customary signal used for the infield deep or normal position is both hands raised chest high or above, with the palms of the hands turned toward the infield (Fig. 144, A). If he wants the infielders to play deeper than normal, he moves both hands in short gestures toward the outfield. For the half-way position, the hands are crossed in front of the chest (Fig. 144, B), and for the short or close-in position, the hands are both waved in short circles toward the chest (Fig. 144, C). In moving the outfield, the coach waves both hands in front of him and in the direction in which he wants the movement made. When they have reached their proper position and he wants them to stop, he holds both hands above his head. When he wants only one outfielder to move, he calls his name and gives the same signals.

The customary signal used to give a batter an intentional pass is to hold up four fingers, or to point to first base.

The coach should have signals with an inexperienced catcher which are used when runners are on first base and third base. He then can inform the catcher to throw to second base on the double steal attempt, to fake throw to second base and then attempt to catch the runner at third base, or

A.



C.



B.



Fig. 144.—

- A. Infield deep position.
- B. Infield halfway position.
- C. Infield close position.

to make his throw to the pitcher, who in turn attempts to catch the runner at third base or home plate.

An experienced catcher can, at his discretion, signal the pitcher to take the cutoff, use the throw through to second base, or fake throw to draw the runner off of third base. A simple set of signals that may be used by coach or catcher follows: If the cutoff to the pitcher is to be played, the right hand is rubbed across the chest. If the fake throw is to be played, the right hand is placed against the chest; if neither is done, the throw through to second base will be made.

The coach usually permits his catcher to call all signals for pitches, but occasionally he may want a certain pitch called. He should, therefore, have a prearranged series of signals with his catcher. A simple set is given for guidance.

The closed fist can be used for the fast ball; the open hand for the curve ball or breaking ball, and the wiggling of the fingers for a change of pace. The spot to which the ball is to be delivered is designated by the position of the hand.

Thus, if the pitch wanted is a fast ball, shoulder high, and over the first base side of home plate, the right closed fist is shown shoulder high. If a curve ball on the same side, low and knee high, is wanted, the open right hand is shown knee high. For pitches on the third base side of home plate, the left hand is used. If the coach is sitting in a dugout so that the knee signal cannot be seen, by prearrangement the low pitches can be designated by showing the hand belt high.

In cases of inexperienced players, a signal may also be used for a pick-off play. This signal may be the rubbing together of both hands or some similar movement.

The First and Third Base Coaches

The importance of the first and third base coaches should not be underestimated, since close games may be won or lost by their decisions. Their importance is shown in the top levels of professional baseball where, in the large majority of cases, these individuals are employed for coaching duties only. The average school or semi-pro club generally gets its

coaches from the playing roster. The members of the squad selected as coaches should be mentally alert and have the ability to use good judgment and make quick decisions on close plays. This is particularly true of the third base coach, who must often decide whether to hold a runner at second base or third base, or send him on for an extra base.

Often a member of the squad does not have the physical ability to play the game well but has the qualifications for a good coach. The head coach can take such an individual and train him in the duties and responsibilities of base line coaching. Otherwise, if the pitching staff is large enough, the pitchers should be trained as coaches, since they all will not be in each game.

DUTIES OF THE FIRST BASE COACH

When the offensive team is occupying the bench or dugout on third base, the first base coach gives right-handed batter's signals as previously stated. The batter will then not have to turn around and look at the bench for instructions.

Many batters when they hit a ball in the air or directly at a fielder assume it will be caught and do not hustle to first base. By not running hard they are sometimes deprived of a base hit or, if a fly ball is dropped or the ball gets away from a fielder, they are unable to take advantage of the situation. The first base coach can assist the batter-runner by calling "run hard," at the same time circling his left arm vigorously toward right field until the play has been completed (Fig. 145A).

If the ball is not fielded or is dropped, the coach should call "go, go" if he decides the runner can take an extra base; "take your turn," if there is doubt; and "hold up," if he is sure the runner cannot advance.

When a ball is hit to the left field side of the diamond, the batter-runner is not able to watch the ball and still maintain speed. Should the ball get away from the fielder, the coach should call "make your turn," at the same time circling his left arm toward right field and pointing toward second base with his right arm (Fig. 145B). Even though the ball is

Fig. 145A.—Run hard to first.

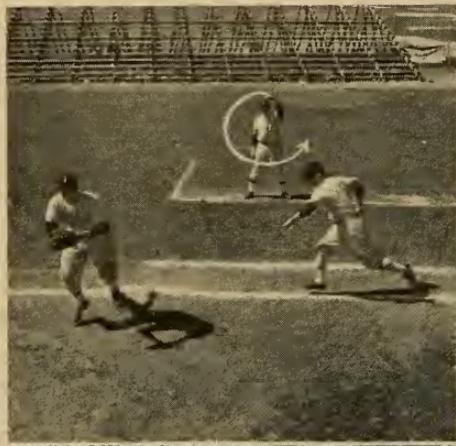


Fig. 145B.—Make turn at first.

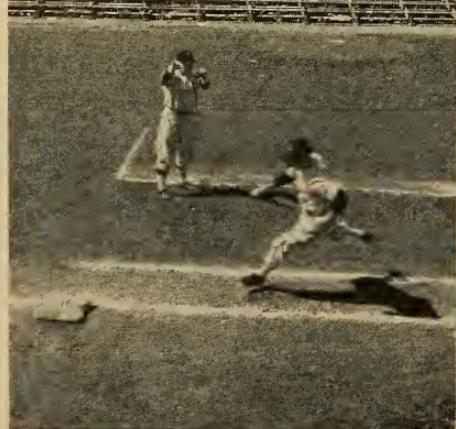


Fig. 145C.—Keep going to second.



Fig. 145D.—Position to alert runner at first.

fielded cleanly by an infielder, the coach calls "run hard" until the runner reaches the base and then calls "hold up." He should hold both hands palms down in front of him indicating to the runner not to make the turn. This arm action may also have some influence on the umpire on a close call. When a ground ball is hit to the right field side of the diamond, the batter-runner can keep the ball in sight at all times. The coach should still advise him to "run hard," however, and in case of an error or missed ball should aid him by giving instructions as previously described.

When the coach decides the batter-runner can advance two bases because of a hit or an error, the coach should step toward first base and call "go, go," at the same time pushing both hands from his chest toward second base (Fig. 145C). The call should always be made several times.

When First Base Is Occupied

When a runner reaches first base the coach should immediately inform him who has the ball and at the same time advise him to stay on the base until the pitcher assumes a position with either foot in contact with or astraddle of the pitcher's plate. The rules state a pitcher cannot assume either position without the ball in his possession. Waiting on the base until the pitcher assumes either of these positions will prevent an infielder from hiding the ball after a play and then making a quick throw to first base when the runner leads off.

The coach should advise the runner of the stage of the game, the score, the number of outs, and the importance of his run. He also advises him of the defensive strength and weakness of the opposition, whether the pitcher has a good initial move, and which infielders and outfielders have good throwing arms. If the pitcher has a good initial move, the coach should advise the runner to take a short lead, and if he knows the move, he should tell the runner what it is. The coach should also advise the runner if the pitcher delivers on a count, thus aiding him in getting a start if a steal is attempted. If a bunt is in order, the coach must be alert to the first baseman

making a break for a bunt and then returning to the base for a throw from the catcher.

When First and Second Bases Are Occupied

When first and second bases are occupied the first baseman will usually either be playing behind the runner for a batted ball or well ahead of him for a bunt, his position depending on the stage of the game. When the first baseman plays behind the runner, the coach must be alert to warn him to "get back" if the first baseman cuts in to the base for a possible play (Fig. 145D). When the first baseman plays for a bunt ahead of the runner, the coach must watch the second baseman for a possible pick-off since he will have shifted closer to first base to cover.

The coach should give advice to the runner on first base on all fly balls. If a preceding runner touches up, the runner on first base should touch up. If it is a long fly ball that looks as though it will be caught, the runner can often advance after the ball has been caught. On any short, fair fly ball the runner should take a lead so that he can advance safely if the ball is not caught and he can return safely if it is.

Whenever infielders go back after foul fly balls, the runner should touch up. If the fielder catches the ball in poor throwing position, the runner may be able to advance. If, in the coach's opinion, a fly ball will not be caught, he should call "go, go."

When Second Base Is Occupied

The first base coach advises a runner on second base, only if third base is also occupied, and then only when the short-stop or second baseman runs in to the base for a probable play. His only advice should be to "get back." Otherwise, the third base coach assists the runner. This avoids any possibility of conflicting instructions.

DUTIES OF THE THIRD BASE COACH

When the offensive team occupies the bench on the first base side of the diamond, the third base coach gives batter signals to left-handed batters.

As previously stated, he also takes over the guiding of a base runner after he passes first base. When first base is occupied and a ball is hit into right field behind the runner, particularly on a hit-and-run play, the runner may lose sight of the ball. Whenever this occurs he should immediately look at the third base coach, who should advise him to "get back," if the ball is hit in the air and will be caught; to "hold up," if he cannot advance to third base; to "make the turn," if there is a possibility to advance, and "keep coming," if he should continue his advance. The coach does this by voice and arm signals. If the runner is to get back, he waves both arms toward first base, at the same time calling "go back, go back." (The first base coach should also call.) If the runner is to hold up at second base, the coach faces the runner, holds both arms above his head, palms facing the runner, and calls "hold up." If the runner is to make the turn at second base with the possibility that he may advance because of an error or slow fielding of the ball, the coach holds his left hand above the shoulder, palm toward the runner, and circles his right arm counter-clockwise in short circles. If he wants the runner to continue on to third base, the coach drops his left arm and swings his right arm in full counter-clockwise circles. The coach should turn slightly toward left field when the signal to continue in to third base is given.

When any ball is hit into left field, the runner should be able to use proper judgment as to what to do. The coach should still advise him, however, once he has passed second base.

When Second Base Is Occupied

As soon as a runner occupies second base, the third base coach advises him to locate the ball and hold his base until the pitcher assumes his pitching position. He informs him of play situations, particularly the score and number of outs. With the score close and less than two outs, a hard-hit ground ball to the shortstop will often be played to third base, if the runner attempts to advance. The runner will, of course, have to advance if first base is also occupied; the coach should point this out.

As soon as the pitcher assumes his pitching position, the third base coach advises the runner to "get off." When the runner has assumed his lead, the coach advises him to "stay up," or to "get back," if either the shortstop or second baseman breaks in to the base.

If the coach sees either infielder edge in toward the base he should call "heads up," warning the runner that a pick-off may be attempted.

In giving the voice signals, the coach should cup his hands around his mouth so his voice carries, and call his instructions in a steady even cadence which should only be broken when a change in instructions is given. The runner will then be immediately aware of the change in signal.

If a long fly ball is hit with less than two outs and the coach feels the runner can advance after the catch, he calls to the runner to "touch up." If the coach feels the runner cannot advance, the runner should be told to "come half way." The runner can then advance if the ball is dropped, and return safely if it is caught. On a short fly ball the runner should always be advised to take a lead. This lead should be such that there will be no possibility of a double play after the ball is caught. If there are two outs, the runner should be advised to run hard on any fair hit ball. He may be able to advance an extra base should an error be made.

Guiding Runners to Third Base and Home Plate

A runner approaching third base seldom is in position to see the ball directly after it has been hit. The third base coach must therefore guide the runner completely. The coach should place himself so that the runner can easily see him. If the coach wants the runner to hold up, he faces directly toward him, raises both arms above his head, palms toward the runner, and calls "hold up" (Fig. 146A).

If a play is being made on the runner, but he need not slide, the coach moves toward the base, points at it, and calls "stay on," indicating a throw is coming (Fig. 146B). If the runner is to slide straight into the base, the coach steps toward the

Fig. 146A.—Hold up at third.



Fig. 146B.—Stay on third.



Fig. 146C.
Slide to
left.
Slide to
right.



Fig. 146D.—Make turn at
third.



Fig. 146E.—Keep going to
score.

base with arms extended forward, palms downward and calls "slide." If the coach wants the runner to slide to either side of the base, he steps to that side and extends his arms to the same side (Fig. 146C).

If the runner is to make his turn at third base, the coach should move toward home plate so he can easily be seen by the runner. He waves his left arm in short clockwise circles, at the same time holding up his right arm with the palm of this hand facing the runner (Fig. 146D). If the runner is to continue on to home plate, the coach moves well toward home, waves his left arm in full clockwise circles while keeping his right arm at his side, and calls "keep going." If the play is going to be close, the coach advises the runner to "run hard," at the same time circling the arm hard (Fig. 146E). If there is no necessity for hurry, the arm circle is slower and the runner is advised to take his time.

In cases where the coach is not immediately certain the runner can score, he should take the make-the-turn position. If he decides the runner can then score, he should immediately run toward home plate, giving both the voice and arm signals to keep going. If he decides the runner cannot score, the coach runs toward the runner giving the "hold up" signal.

As soon as the scoring runner passes him, the coach immediately should put his attention on any succeeding base runner.

When a runner from second goes to third on a slowly hit ball to the third baseman, the coach must be particularly alert. If the third baseman cannot make a throw to first base in time to retire the batter-runner, he may fake a throw and then wheel and pick off the runner at third base as he makes the turn; the shortstop ordinarily will cover. When this occurs, the coach should call "stay on the base," at the same time pointing to it.

When Third Base Is Occupied

When third base is occupied the coach again advises the runner of the number of outs, the score, and what to do. If the infield is playing in, the runner should not attempt to

score on a ground ball with less than two outs unless it goes through or gets away from an infielder.

When the infield is playing deep, he should attempt to score on all ground balls hit to the shortstop and second baseman, regardless of the outs. With one out and if the runner is fast, he may attempt to score when the ball is hit to the third baseman or first baseman. If the score is close and the runner is slow, he should not attempt to score if the ball is hit directly at either, and there is a good possibility of a play being made on him.

If the straight squeeze play is to be attempted, the third base coach alerts the runner to the play. A good method to use is simply to step close to the runner and tell him, out of earshot of the third baseman. This is best done by the coach stepping close to each runner who reaches third base and talking briefly with him. Then, when the play arises, this action will seem natural and not draw attention. On the safety squeeze, the coach alerts the runner by saying "heads up" or "be alert."

The coach advises the runner to touch up on any fly ball hit to the outfield. Should an outfielder make a spectacular catch the runner is in position to score, which he would not be if he took a lead on the assumption that the ball would not be caught. He can always score on a base hit anyway.

On short fly balls to the outfield, the coach advises the runner to take a short lead. Ordinarily he cannot score if the ball is caught. When an infielder goes back for a fly ball and there is a possibility he will be in poor throwing position after the catch, the coach again advises the runner to touch up. He may be able to score.

On long foul fly balls the runner should be advised to touch up. If the ball is caught, the runner can score.

The runner should be advised to be in position to score if the pitched ball gets away from the catcher. He should not lead in such a manner that he is moving back to third base as the ball is delivered. The coach advises him as to the length of the lead.

When Second and Third Bases Are Occupied

When second and third bases are occupied, the third base coach handles the runner on third along the principles described above and gives the runner on second base practically the same instructions as if third base were unoccupied. More chances can be taken, however, in attempting to score on a ground ball. If there are less than two outs and a play is made at home plate which catches the runner in a rundown, he should try to keep from being tagged until the batter-runner has a chance to advance to second base.

When First and Third Bases Are Occupied

The third base coach advises the runner on third base in the same manner as though no other base were occupied. In addition, he has the duties of informing him when a double steal is to be attempted, if the hit-and-run is to be played, or if the runner on first base is going to attempt a single steal.

If the double steal is called for, the runner should be told to watch for a fake throw to second base, a throw to the pitcher in an attempt to draw the runner off of third base, a cut-off by either the shortstop or second baseman, and to attempt to score if the throw goes through to second base.

The runner should not advance on the hit-and-run play until the ball has been hit, and then only under conditions previously stated. If a double play, second base to first, is started, however, he should advance. He should hold his base on a single steal by the runner on first base, since this play is usually used when it is fairly certain the runner will make it.

The straight squeeze play is played the same as with a runner on third base only, except that the runner on first base may attempt to reach third base on the bunt, since he starts when he is sure the pitcher will deliver to the batter.

When All Bases Are Occupied

The instructions given by the first and third base coaches are the same for the runners under their direction. They should stress that all runners must run hard on all ground

balls. Each runner is forced off of his base and unless he is in a position to slow down the attempted play—breaking up a double play, for example—every effort should be made to reach the next base.

POINTS TO REMEMBER

Coaches should never assume a runner or runners will do the right thing. Always give instructions.

They should know the fielding and throwing abilities of all the opposing players, as well as the hitting, bunting and running abilities of their own team.

They should anticipate any possible mistakes the defense may make and be ready to take advantage of them.

Good coaching on the bases is the key to winning close games.

CHAPTER 17

GAME PREPARATIONS

Preliminary Preparations

A coach should make plans for his next game several days in advance. These plans should be tailored to fit the opposition; through careful analysis and planning, ball games have been won before the players ever took the field.

If the coach knows that the opposition may use a left-handed pitcher against him, his batting practice should be against left-handed throwing. If he has no left-handed pitchers, he may substitute an outfielder or infielder for the batting practice pitcher. Similarly, if he knows that the opposing pitcher depends on a fast ball, batting practice should be against fast ball pitching. If a curve ball pitcher is expected, batting practice should be against pitching of that type. If at all possible for a period of at least two days before the game, practice should be against the type of pitching expected.

It is good procedure to discuss the known strength and weakness of the opposition with all team members. Discuss the hitting abilities—are the players power hitters, weak hitters, pull hitters or straight-away hitters? Discuss the speed of the players, the throwing abilities of the outfielders, their general defensive and offensive strength or weakness; any points that may have a bearing on the game.

Some of the members of the team may have played with or against members of the opposing team and can offer valuable suggestions. More information will be available in the score book, if the opposition has been played before.

This discussion can be held a day or so before the game, or just before game time.

The coach should instruct the pitchers who may be used in the game to take a good work-out two days before, preferably by throwing about fifteen minutes of batting practice to sharpen their control. The day before the game they should throw very little, just enough to loosen the muscles of the arm and shoulder. The work-out should be easy and energy conserved for the next day.

General practice for an hour, or an hour and fifteen minutes, on the day preceding the game is ample. Batting practice should be in regular hitting order. Any utility player who may get into the game should take his turn.

Since the batting order has been set according to the abilities of the players, offensive situations may be reviewed, particularly in early season. For example: if the man at bat is a good hit-and-run player, the preceding player should be put on first base, and the hit-and-run should be played on the batter's last swing of his turn at bat. Usually any play that is to be reviewed should be played on the last swing so that the batter can run to first base after he hits the ball. During his turn, each player should take from three to five swings.

If the squad is large enough, a defensive team can be placed on the field. The players can then carry out their offensive assignments under game conditions. As the signal is given on the last swing and the ball is hit, the defensive team makes their play. After three outs, the offensive play should be continued with the next batter in order taking his turn as though it were the beginning of another inning. Following this plan will enable the players to review their offensive plays and at the same time give them several rounds of hitting practice in a short period of time.

Fielding practice for a period of ten to fifteen minutes should follow. The pitchers to be used the next day should not participate. They are through with the day's work after hitting practice and should be sent to the dressing room. The infielders and outfielders should take a few minutes to loosen up thoroughly before going out to their positions. Fungo hitters should be placed behind third base and first base to

hit fly balls to the outfielders (some coaches have their fungo hitters hit to the outfield between home plate and third base, and between home plate and first base, but unless they are good at it there is danger of hitting an infielder).

Fielding practice should be snappy and brisk. It is advisable to hit some fly balls to the infielders and to the catcher at the end of practice. After these players have had some practice on fielding fly balls, the outfielders should go to their respective fields. Fly balls and ground balls should be hit to each outfielder, with the infielders holding their regular positions. Before the ball is hit, or as it is hit, the coach should call the base to which the outfielder should throw. At least one throw should be made to second base, third base, and home plate. As the base is called, the infielders should swing into position for the play.

Relay throws should be reviewed and practiced, particularly if practice has been held on an open field and the game is to be played on an enclosed field, or vice versa. If the type of defense that has been used is for an open field and relay practice is not held for a closed field, the shortstop and second baseman may not know how to play the relay.

This should conclude the physical activity for the day.

The Day of the Game

On the day of the game, a time should be set for all players to appear on the field. In schools and colleges, this generally depends on the location of the playing field and class schedule. On days when classes are in session, game time is usually between three and four o'clock. This also gives the student body and faculty an opportunity to see the game. On other days, the game's start is usually set for an earlier hour.

Because of the time element involving the home team, the visiting team usually holds batting practice first. The pitcher and catcher of the home team should make every effort to be with their coach during this time, so that the batting strength and weakness of the opposition can be observed and discussed. Other members of the home team

who are able to report at this time also should study the abilities of the opponents.

All players who may take part in the game should be on the field when their batting practice starts. Under ordinary conditions, a period of from twenty to thirty minutes is plenty. The number of swings allowed each batter is usually three to five, with a bunt or two added. An occasional hit-and-run also may be practiced. Following his last swing, a batter should run to first base or beyond to loosen his leg muscles.

Usually when the visiting team takes hitting practice first, it will also take its fielding practice first. The players of the home team should observe this for a time, noting which players do not throw well or field well.

A period of ten minutes is usually allotted to fielding practice. At least five minutes before their fielding practice, the players should start playing catch to loosen their throwing muscles. The pitcher will normally start his warm-up about fifteen minutes before game time, or at the time the second fielding practice starts. If it is very cold or very hot, this time should be changed to suit the pitcher's requirements. On a cold day, the warm-up may be longer than on a warm day.

After the second fielding practice has been completed, a period of five minutes is taken during which the grounds-keepers smooth out the dirt on the pitcher's mound and around home plate and re-mark the lines of the batter's box. The dirt area of the infield should also be smoothed, since fielding practice cuts up this area.

The umpire meets with the team captains and, usually, the coaches, to discuss ground rules. The batting orders are given to the umpire-in-chief and opposing teams. The captains then go back to their teams and inform the players of the ground rules.

DURING THE GAME

Most coaches control the offensive and defensive play. As the game progresses, the coach of a young team, in particular,

may do some mental suffering, but at this time more than at any other he should take the attitude of an advisor and not a disciplinarian. He must realize that the players have neither the experience nor judgment that he has, and they are sure to make occasional errors, both mental and physical.

Some coaches prefer to score the game personally, but usually somebody else is designated—the assistant coach or student manager, perhaps. In this case, the coach is free to make observations and comments at all times. However, a scorer should be sitting next to the coach so that the book is always available to him for information. Any notes for future use also can be written down by the scorer.

Any battery men not assigned for possible relief duty should be sitting close to the coach so that comments made on defensive play can be directed to them. All other players should be on the bench and listening. Learning baseball is more than the mastery of theoretical fundamentals, although that is important; observation of, and participation in, actual game situations is paramount to good play.

CHAPTER 18

TEAM ORGANIZATION

Fielding a successful baseball team requires more than talented players; it also requires good organization. There are assignments which never appear in the box score, which nevertheless must be performed well. The small organization may have no more than a coach who must handle all the problems that are faced by the more numerous members of the staff of a large organization, working under the direction of the coach. The one-man operation is seldom necessary; the semi-pro or town team can always find help in the community from people who love the game, and the school team can draw upon students—whose ability should not be underestimated, incidentally—for help.

A sound college or other school organization consists of the head coach, the team, the team captain, the student manager, and his assistants.

The head coach is the director of the organization, his duties on the field being similar to those of the manager of a professional team. The captain of a school team has duties similar to those of the captain of a professional team, and the student manager's duties can be compared to those of the business manager and traveling secretary of a professional team.

THE HEAD COACH

Natural leadership—the ability to arouse enthusiasm and win the confidence and respect of his players—is the first

mark of a good coach. A thorough knowledge of the game is essential, but the ability to impart this knowledge is even more important. A coach may be able to give an excellent performance, but not be able to teach the game. The ability to teach and to establish the conditions that make for good teaching is absolutely essential.

The coach must make every effort to learn the offensive and defensive abilities of each player. Some players do better under pressure; others not so well. The temperament of the players must be considered—one needs a pat on the back, but for another a sharp word or two brings better results.

When inexperienced players make errors of judgment, the coach should be patient and helpful and never criticize in an unjust way. He should always remember that physical errors occur in the best of baseball; as long as a player hustles and does his best, he should never be censured for such an error.

The coach should be able to bring each player up to his highest degree of efficiency for each game, which means the adaptation of conditioning and training methods to fit the needs of the individual concerned.

Generally a coach has few, if any, players on his team who are far enough advanced in their training to plan and direct offensive play themselves. This, therefore, will be the coach's responsibility. He also should advise the team and individual players of their defense assignments (see Ch. 16, *Directing Team Play*).

The coach should conduct rules discussions as a part of early season training so that all members of the squad understand them, particularly the captain, who is the only player who should take up any rules interpretations with an umpire. Idle time on trips and on days when the weather is bad can be used for further discussion.

The coach picks the team and sets up a practice and training schedule. He directs the captain and student manager in their duties and consults with them on problems that may arise.

PICKING THE TEAM

The coach should be impartial, objective, and deliberate in deciding on his line-up. He may be mistaken about a player's ability, but when he has decided on a line-up it should be given a thorough trial. Continually changing players will make them lose confidence and is not conducive to improvement in the development of team play.

In picking the team, both the offensive and defensive ability of each player and his value to the team must be considered. For example, a good hitter may be a poor defensive player and will be of less value to the team than another player who does not hit as well but plays a much better game in the field. Some players are routine in routine situations, but rise beautifully in the clutch. Such factors, of course, must be taken into consideration.

The Defensive Line-Up

From the defensive standpoint, a team is usually picked through the middle—that is, pitcher, catcher, second baseman, shortstop and center fielder; then the third baseman, first baseman, left and right fielders.

It has been said many times that a good pitcher is as much as 80 per cent of the defensive strength and, therefore, should be given the first consideration. If the pitching is weak, any other player—infelder, outfielder or catcher—who, in the coach's opinion, has the possible qualification should be given a chance to pitch. A player with a good fast ball, mental poise and physical strength and endurance has the basic assets.

The catcher is the field general defensively, so to speak, and is second in importance to the team. He should be the next player picked. A man who knows baseball, has a strong, accurate throwing arm, and is alert and full of energy is the ideal type. Good size is an asset, although not an essential.

Defensively, the second baseman has more responsibility than any other infelder. Speed, alertness, the ability to field, and quick thinking are essential to his play. A strong arm,

although an asset, is not of first importance since many of his throws are short, quick pegs to first base.

The shortstop should have a strong, accurate throwing arm. He should be a good fielder and have the ability to move well in either direction as well as move in fast on ground balls.

The center fielder's requirements are speed, a good throwing arm, and the ability to field and judge ground as well as fly balls.

The third baseman must be able to field bunted balls quickly, block hard-hit ground balls, and have an accurate throwing arm that is fairly strong.

The first baseman need not be exceptionally fast, but should be capable of nimble footwork around the base. Height is an asset making for a better target. Ability to field ground balls and throw are not as essential as at the other infield positions and can be sacrificed to some extent for the ability to hit.

Speed and fielding ability are of equal importance in both left and right fielders, but a good throwing arm is more important in the right fielder.

The Offensive Line-Up

From the offensive standpoint, a team is seldom, if ever, made up of players who all have equal ability in batting and base-running. It is, therefore, the duty of the coach to analyze the capabilities of his players and distribute their respective strengths in the batting order so that order will be as balanced and run-producing as possible. Assuming the players are available, a well-balanced batting order would go as follows:

The First Batter.—The first batter should be one with a talent for getting on base. A fast runner and good "waiter" is preferred. He should have a good batting eye and not be tempted to swing at bad pitches. He should seldom swing at the first pitch when there is no one on base, since normally he will not be a power hitter.

This batter often will be a small man—one who is difficult to pitch to, with confidence in his ability to get on base, even though two strikes may be called on him.

If he is a left-handed batter, fast and a good bunter, he will keep the defense on edge, since they will not know what he is going to do. His speed in running will often cause the defense to hurry their play on him and thus cause errors.

The Second Batter.—The second batter should be a good bunter and a good hit-and-run man. He need not be a long ball hitter. There are certain players who can place the ball and hit to either field. They are usually choke hitters, with good control of the bat. The number two position in the batting order is a good place for such a batter. Speed is an asset, but not as necessary as it is to the first batter.

The Third Batter.—The third batter should be a good long ball hitter and one who is fast on his feet. His job is to drive in runs. Speed on foot is an asset in that he will be better able to score on hits by the fourth batter.

The Fourth Batter.—The fourth batter should be a long ball hitter and one that hits well when runners are on base. This is the traditional clean-up spot. The assumption is that one or two of the first three hitters will reach base and a heavy hitter in the fourth position will have the opportunity to drive in the runs.

The Fifth Batter.—The fifth batter's qualifications are much the same as those of the fourth batter. If a consistent hitter is not available, stress should be placed on the ability to hit a long ball.

The Sixth Batter.—The sixth batter should have the same qualifications as the first batter and, if possible, the added ability to drive in runs. He often has this opportunity because of the hitting abilities of the third, fourth, and fifth hitters. A so-called "clutch" hitter is an ideal player for this position.

The Seventh Batter.—The seventh batter has much the same qualifications as the second batter, but with more stress placed on hitting a long ball. If their hitting abilities are

approximately the same, the slower runner should be placed in this position.

The Eighth and Ninth Batters.—When games are played daily, the catcher and pitcher are usually placed in the eighth and ninth positions in the batting order. The reason for this is that pitchers will not play day after day, and the catchers may catch only certain pitchers, thus not playing daily. If, however, the catcher is a good hitter and plays most of the games, he should be placed in third, fourth, or fifth position, where his hitting will be of the most value.

If the players are changed in their batting order frequently, they will not carry out their offensive assignments as well, since they will not be as well acquainted with the offensive pattern as if they played with the same players in the same position daily.

When teams do not play daily, as in school and college ball, and the pitcher and catcher are good hitters, they should be placed in the batting order according to their hitting ability, two weaker batters being placed in the eighth and ninth positions.

Sometimes a team may have only one or two good hitters. This is particularly true in high school and frequently in college baseball. When a team has only one good hitter, he should be placed in the third or fourth position, the players batting ahead of him being chosen for their speed and ability to get on base. If there are two good hitters, one should be placed in the fourth position and one in the seventh position. The fifth batter should then be a fast runner and a good bunter, and the sixth batter a good hit-and-run man. If there are three good hitters, they may be placed in third, fourth, and seventh positions, or fourth, fifth, and eighth positions, fast runners with the ability to get on base being placed ahead of the good hitters. After the first inning, any one of the nine players may start the next inning, and if the ability to get on bases can be distributed so the hitting can be utilized to the best advantage, more runs will result.

THE CAPTAIN

Each team should have a captain, usually one chosen by his teammates at the end of the previous season. If a captain has not been chosen, the coach should appoint one at the beginning of the current season.

A captain can be of valuable assistance to the team as a leader on and off the field. He should be aggressive but not overbearing, mentally alert, and thorough in his knowledge of the rules of baseball. Ordinarily, he also should be able to play the game well. He should give encouragement where it is needed, and iron out minor difficulties that arise among the players. The coach should confer with the captain on team problems and give his position dignity by making such conferences of real value to the captain in his relations with other members of the team.

Game Duties of the Captain

A conference is held at home plate before the game for the captains of the teams, the umpires, and sometimes the coaches. At this time the captain presents the batting order to the umpire. Local ground rule changes are discussed by opposing captains. In case of disagreement between them, the umpire makes the final decision. Any rule changes are made to fit any unusual conditions under which the game is to be played, and later are presented to the players by the captains.

THE STUDENT MANAGER

The student manager is of great value to a high school or college team. His duties are similar to those of a traveling secretary or business manager of a professional team. Where the student manager system is in effect, he is usually a senior, usually appointed at the end of the season for the following year. The appointment is often made on a competitive basis and on recommendations of the outgoing manager, the captain and the coach.

In large schools there may be four freshman managers, three sophomore managers, two junior managers and the

senior manager. The senior manager holds the authority; it is his duty to see that the other managers function efficiently. In smaller schools there may be only two or three assistant managers. An assistant manager often is assigned to work with the freshman squad. All assistant managers should be selected on a merit basis from the standpoint of personality and efficiency in handling the work. When this system is not in effect, volunteers, because of their interest in the sport, will usually offer their services. Several can be found who will have the necessary qualifications and will do an excellent job when given the authority to carry out the delegated assignments.

The Manager's Duties

Under the direction of the manager, all necessary equipment is on the field in ample time for practice and games and is gathered up after activities for the day are over. He assumes responsibility for any repairs or replacements that are to be made. He keeps a daily attendance record, along with class schedules, phone numbers and addresses of all members of the squad. Batting and fielding averages and all records of the season are kept, the manager frequently acting as official scorer.

When games are played at home, the senior manager should assign several of his assistants to care for the needs of the visiting team and officials.

Before the team goes on a trip, the manager consults with the coach and then arranges for all transportation and hotel accommodations. He posts the list of squad members chosen by the coach who are to make the trip and presents these members an itinerary in full detail, including assignment of roommates.

The estimated expenses are figured and the manager obtains the necessary funds from the department handling the finances. He checks with each player to see that he has his equipment in full.

On the trip he keeps a receipt book, itemizing all expenses, and on the completion of the trip makes out an expense sheet

TRAVELING EXPENSE
VOUCHER

DEPARTMENT _____ DATE _____

PAY TO _____ **(Name and Address of Payee)**

PURPOSE OF TRIP: _____

NOTE: RECEIPTS MUST BE ATTACHED FOR PULLMAN OR EXTRA FARES.
HOTELS MUST BE NAMED.
MEALS MUST BE ITEMIZED SHOWING COST OF EACH MEAL.

TOTALS **1**

Account to
Be Charged _____ Use Account Number Stamp _____

**Certified
Correct**

Payee _____ Date _____

Correct _____ **Dean or Administrative Officer** **Date**

Letter of

Approval _____

Environ Biol Fish (2010) 91:445–456

Fig. 147.—Sampl

Expense Class 03 **Special Code**

Approved _____

BUSINESS MANAGER & SECRETARY OR CONTROLLER

Approved ..  University Treasurer

Approved _____

Voucher and Chief Accountant

Check Number: _____

expense voucher.

Fig. 147.—Sample expense voucher.

attaching all receipts. The expense sheet should itemize transportation, lodging, meals, and all other expenditures. Notations should be made on the sheet for any expense not listed. Fig. 147 is a sample sheet.

Because other help is not available, the manager may be called on to issue clean towels and gather soiled ones. He may be called on to direct the sale of tickets or even supervise the care of the playing field.

At the end of the season, the student manager with the equipment attendant makes an inventory which is given to the coach, who in turn makes recommendations for the following season's needs and equipment budget.

The last duty of the student manager is to turn over to his successor a list of all duties that he performed and to recommend any improvements that may be made.

CHAPTER 19

ADMINISTRATION OF THE BASEBALL PROGRAM

Finance

In the majority of schools and colleges, baseball cannot be depended on to finance itself from gate receipts alone, and funds for carrying on the sport are raised in various ways. In many cases the gate receipts of all sports are placed in a general fund, from which a portion is allocated to baseball. Athletic coupon books may be sold, or students may be assessed an activity fee at the beginning of the school year, with a portion of the fee being placed in the athletic fund for baseball. Other methods of financing are the assessment of an athletic fee, which is included in the regular school fees, or the students may buy an athletic card which permits them to attend all athletic contests. Many of the large high schools use the latter plan.

Because of the lack of general gate receipts, small schools may have to use other means to raise money. School dances, carnivals, plays, concessions, the sale of advertising for score cards, and the sale of the cards themselves—these and dozens of other schemes are all common, and work effectively.

The semi-pro or community team generally depends heavily upon gate receipts, and many are subsidized by business men or other townspeople. Baseball is a game with many friends, and some can be found in almost any town.

The Budget

A statement of the anticipated expenditures and receipts, or budget, for the coming year should be made out by the

coach or some other designated representative of the school or team. If budgeting is in the hands of some other individuals, the coach should go over the statement with them in regard to the purchase, care, and repair of equipment; scheduling of games, home game expense, travel, medical expense, insurance, care and maintenance of the field, awards, and all expense involved in maintaining a team.

A budget cannot be followed to the letter, of course, but it is an estimate of costs and should be adhered to as closely as possible. It is usually set up from past receipts and expenditures, but changing conditions, from year to year, may require careful planning and control.

CARE AND PURCHASE OF EQUIPMENT

Generally, equipment should be purchased from representative jobbers of sporting goods who will give good service. Well-known manufacturers will recommend jobbers handling their supplies. It will be found that buying will usually be made through several concerns, since no one manufacturer makes all the best equipment to fit a team's needs.

Careful thought should be given to the purchase of proper equipment. As in any other game, the equipment that is chosen can have considerable influence on a player's effectiveness. The equipment that is purchased should be the best that can be afforded, and proper fitting must receive utmost attention. A player with good equipment, well-fitted, not only feels more confident but also plays a better game. Get the best, be sure it fits, and the game is then dependent upon the physical and mental skills of the players.

THE TOOLS OF THE TRADE (Personal)

Personal equipment for the team's players consists of (1) shoes, (2) sanitary stockings, (3) outer stockings, (4) supporters, (5) sliding pads, (6) pants and shirt, (7) belt, (8) cap, (9) jacket, (10) undershirt, (11) fielder's glove, (12) baseman's mitt, (13) catcher's mitt, (14) body protector, mask, and leg guards, (15) bats, (16) uniform rolls, and (17) sunglasses.

Shoes.—Well-fitting shoes of good quality are of considerable importance. The quality of shoes varies, cowhide being the least expensive. A shoe of blue-back kangaroo leather is lighter in weight and of better quality. The best type of shoe is made of yellow-back kangaroo leather with oak leather tap and heel, and has lightweight innerspring soles, into which the spikes are fastened with copper rivets. The spikes are of steel, sharpened and beveled and are either hand-forged or ground, the best spike being carbon hardened. The shoe is light in weight.

The blue-back kangaroo or good quality cowhide shoe is recommended to college, school and sandlot players, if the shoes are to be worn for night baseball, or in areas where there is much moisture. The wearing qualities of these shoes are not as good as the yellow-back shoe, but moisture will soon cause the latter to deteriorate. The yellow-back shoe is excellent for dry weather, and if the budget will permit, the player should be furnished with a pair that can be worn for damp weather and a pair that can be worn for dry weather.

Prestretched uppers are the most satisfactory, because they hold their shape. The shoes should be soft and pliable and fit glove snug. They should hug the heels without binding, fit snugly under the arch and not gape at the ankle. To be certain they fit well, both shoes should be tried on and laced snugly. The wearer should then jab his feet downward and forward, as in running, to get the feel of them. The toes should fit against the soft leather toe tips, and there should be a very slight pressure against the toes if the shoes fit well. Any uncomfortable pressure may cause injury to the nails, or cause blisters to develop on the toe.

If the shoe is too long, it will curl at the toe and cause the player to stumble or trip as he runs. When it is laced, there should be space between the eyelets. If the eyelets meet, the shoe is too wide.

The shoes should be oiled often for constant resistance to any moisture, and a pan of water-proof oil with brushes should be available so that each player can apply it as needed.

When games are played in wet weather, the shoes can be cleaned and oiled by the players before they place them in their lockers.

A self-polishing shoe dressing also is recommended to be used as needed. The oil and dressing preserve the life of the shoes. If a leather oil is not available, petrolatum jelly rubbed lightly on the shoes will answer the purpose.

Pitcher's shoes should have toe plates, made of aluminum or steel with a leather cap over the toe of the pivot shoe. As a pitcher delivers a ball, he invariably drags the toe of his pivot foot on the ground, and the toe plate gives protection.

Sanitary Stockings.—Lightweight, full-length white cotton stockings are commonly used, although some players prefer the quarter-length. They give protection against chafing and blistering of the feet and toes, and absorb perspiration. They are easily laundered and should be changed daily. Colored stockings are not recommended because of the possibility of dye poisoning.

Outer Stockings.—Ribbed outer stockings of cotton and wool, full-length and footless, are worn over the sanitary stockings primarily for appearance. A stocking with full foot would make proper shoe fitting difficult.

Supporters.—The supporter should fit snugly, with a feeling of comfort and freedom from binding and chafing. Catchers and infielders often prefer a cup type of supporter which has a pouch attached. A cup made of aluminum, magnesium or plastic composition which may be bound with felt or a rubber cushion is inserted into the pouch. This gives added protection in case a ball takes a bad hop. The supporter itself, including the waist and leg bands, is of an elastic material.

Sliding Pads.—Sliding pads are used for the protection of the upper thighs and buttocks against possible burns caused by sliding. They are of two types. One is made of two pads, one over each hip, or of four pads with two pads, one upon the other, over each hip. Another type is made up as shorts,

with an extra pad of material over the hips. The pads may be quilted or of natural finish cloth.

The Pants and Shirt.—The better grade of pants and shirts are of preshrunk, long-wearing flannel. They should be full and roomy. The waist of the pants should be at least two inches more in size than actual waist measure, while the shirt should be at least four inches more in size than actual chest measure. This is the so-called "professional cut," and can be so ordered. This gives ample freedom in movement and eliminates the possibility of binding. The shirt is usually V-neck style and has free arm half-sleeves. The standard shirt front is coat model, button or zipper front. Most uniforms in use are white or gray in color, but any other color may be especially made up.

Belt.—A wide belt fitting the loops of the pants is preferable to a narrow belt. This is primarily for appearance, although a narrow belt may have a tendency to bind.

Cap.—The better caps are made of all-wool flannel, and the best made of broadcloth. The good grade cap contains a leather sweat band; a gauze sweatband has a tendency to irritate the skin. The standard visor is reinforced with stitching and the under visor is green in color to protect the face against the glare of the sun. The six-piece crown gives better depth to the cap and makes for a better fit.

Jacket.—Each player should have a jacket which he can wear when warming up on cold days. It should also be worn on cold or damp days to prevent any possibility of cooling off. For warmth, a jacket of at least fifty per cent wool body is recommended. The better jacket has leather sleeves, although sleeves of self material are satisfactory and are cheaper in price. It should be large enough to give free body and arm action. Specifying the raglan sleeve assures fullness and extra freedom which is necessary in throwing.

Undershirt.—An undershirt is a necessary article of equipment for both warmth and the absorption of perspiration. They are of varying quality and material. For protection on

cold days, pitchers should be furnished with an undershirt of at least 50 per cent wool body. The other players may use the same type of shirt, if the budget permits it. If not, a heavy cotton undershirt will answer the purpose.

As the season progresses and the weather becomes warmer, a lightweight wool-and-cotton or cotton undershirt should be available. On hot days, a very lightweight undershirt is advisable. A T-shirt will answer the purpose very satisfactorily.

The conventional undershirt has split sides at the bottom to prevent crawling on the sides of the body. The body of the shirt should be of natural color, but the sleeves may be of a different color.

A warm-up shirt of specially treated fabric which prevents the evaporation of perspiration is also recommended for the pitchers. This shirt acts as an insulator and keeps the body warm and comfortable in inclement weather. The shirt is also an excellent aid to the player who needs to reduce his weight.

Fielder's Glove.—Each fielder should have a good glove of his own choosing. If a player does not have a choice, he should try the different models and choose the one he feels fits his hand best. Once the glove is chosen, only the player himself should use it. If others are permitted to borrow it, it soon loses its shape and will not fit the hand well.

Gloves are of two, three, and four-finger design. In the two-fingered glove, the first and second finger of the hand are placed in the first finger of the glove, and the third and fourth, or little, finger are placed in the second finger of the glove. In the three-fingered glove, the first finger is placed in the first finger of the glove, the second and third fingers are placed in the second finger of the glove, and the little finger in the third finger of the glove. The better models are made of special glove leather, or top grade cowhide, and are of special construction. They are designed with a prebuilt, deep-well pocket, thus eliminating, to a large extent, the breaking-in process. The leather is hand oil-treated and the pocket is inner-greased. The glove should, however, be used

in practice for a few days before being worn in a game so that it will be well adjusted to the hand of the wearer.

The two- and three-fingered gloves are laced at the finger tips and the lacing can be adjusted. The four-fingered glove may be laced or unlaced.

The web or trap between the thumb and the first finger is an adjustable solid type and is laced down, forming a deep pocket. The heel of the glove is of two-section asbestos felt, with a pad of fine grade felt to keep the heel of the glove from breaking down with use. The seams of the glove are full leather welted, and the heel is laced in.

There are other features in different gloves that a player may like. His likes and dislikes should always be considered.

First Baseman's Mitt.—The first baseman's mitt may be of several designs. The one most frequently used is called a "trapper" mitt. The name "trapper" is given the mitt because the glove construction aids the first baseman in trapping badly-thrown balls. This model has a thumb and two fingers. The hand fits into the second finger of the glove, the first finger of the glove acting as a web or pocket. The thumb of the glove is reinforced under the back to prevent the thumb from falling into the pocket. This reinforcing also prevents the ball from slipping under the thumb as the first baseman attempts to catch a low-thrown ball. The thumb and two fingers are laced together with leather lacing. There are adjustable leather loops inside the glove for the thumb and little finger, aiding in the fit of the glove to the hand. A web controller, to control the spread of the web, is sewed on to the back of the thumb and finger tips.

Another model is called the "snare" model. This mitt has the thumb and palm. The thumb is stiffened to prevent rolling into the palm. A snare made of leather is fitted between the thumb and the palm. The "clutch" model is of similar design, the web between the thumb and palm being fixed.

The regulation model has a thumb and palm and is known as the "open face" model. The thumb is laced to the palm

with leather; this lacing forms a web. This model may have the web controller.

All mitts must conform with the rules set by the Playing Rules Committee of the National Association of Professional Baseball Leagues.

The Catcher's Mitt.—Catcher's mitts are of several designs. The mitts are made of cowhide and have an inner greased pocket, or palm, with "deep-well" pocket. The face of the mitt is of soft leather. Some mitts have a laced-in, hinged break on the side of the palm, nearest to the little finger, so that the palm will break and form a better pocket. The padding is molded felt and should be of such quality that it will retain its life and shape. The gloves have adjustable leather loops for the thumb and little finger, and the trap lace between the thumb and palm is adjustable.

If he has no predetermined choice, the catcher should try several models and choose the mitt that he feels fits him best. The mitt should be used in practice and thoroughly broken in to fit the catcher's hand. He should not permit other players to use it, so it will conform and adjust itself to his hand only.

Body Protector, Mask, and Leg Guards.—*The protector* is of two styles, the regular style with the crotch flap and the short style without. The protector should fit easily and comfortably, and should not bind the catcher as he goes through his throwing action. The harness is made of leather and elastic. The body of the protector is filled with kapok, cross-stitched in parallel ribs to prevent shifting. The short model is preferred by most catchers. It is light in weight and adds to the freedom of movement.

The mask is of two types, bar or wire, and the catcher should choose the one that gives him the best vision. The frames of the mask are constructed of magnesium bar or steel wire. The thin magnesium bar mask gives good vision and is light in weight. The padding, covered with soft glove leather, is laced to the frame. The head harness is made

of leather and elastic or of elastic web. The mask should fit firmly, so that when the catcher is throwing it will not slip and interfere with his vision.

The leg guards should fit well and afford comfort and protection. The guards should have knee-cap and instep protectors, to protect these parts from tip fouls, when the catcher is in a squatting position. The better guards are of heavy corrugated fiber, and have leather shock absorbers inside. The leg straps holding the guards to the legs are elastic, to prevent binding when the catcher is in a squat position.

Sunglasses.—If games are played in the daytime, sunglasses should be a part of each team's equipment. At some time or other players will have need for them, particularly the outfielders. The glasses are of three types:

1. The conventional type which the outfielder wears whenever there is a possibility of their use while he is on the defense.
2. The type that fastens to the under side of the bill of the cap.
3. The type which fits over the ears in the conventional manner, but has an elastic band attached to the temple pieces that fits around the back of the head.

The last two types listed have a spring mechanism which permits the glasses to rest against the bill of the cap when not in use. When needed, a downward tap on the frame of the glasses, or a downward tap on the top of the bill, will flip the glasses over the eyes. As soon as the play is made, the glasses are flipped up against the bill of the cap. The last type is preferred by most players. The glasses are of three different shades: dark, medium dark, and medium. Most players prefer the medium dark.

Bats.—Good bats are made of carefully selected ash or hickory. The wood should be straight-grained, the main grain following the center of the bat throughout. The grain of the wood should not be raised or warped in any way. It should have its natural resiliency and should feel right to the hitter.

Many players select a bat too long or too heavy for their use. A bat which weighs one ounce for each inch in length will usually give satisfactory results. The handle of the bat should fit the player's grip.

The bat should be filled with a suitable material to make it waterproof. Bat manufacturers have different fillers which they use at the factory, and the player should occasionally rub the bat with linseed oil to keep it in condition. The oil can be rubbed in with a bone or smooth-surface bottle. This helps to keep the pores of the wood closed and also aids in reducing checking or splitting.

Paint should not be used because it cracks on impact with the ball and peels in the sun. Lacquers and varnishes are the best finishers.

Uniform Rolls.—A uniform roll of cotton duck material is quite satisfactory. There are two sizes; the smaller carries one uniform, and the larger carries two uniforms. The smaller size is satisfactory for school or college players. The roll has a fiber handle with two straps attached; these are tightened around the roll.

Field and Other Equipment

Bases.—The best bases are made of a heavy duck material and have a double quilted top. They are stuffed with curled hair, wool, or cotton waste with a foam rubber topping. The rubber pad gives resistance to wear and spike cuts.

Two heavy straps fitted around the bases are used for fastening them to the ground, and four spikes for each base are included at the time of purchase. These spikes should be driven into the ground in such a way that the base will be held firmly when strapped down.

Home Plate and Pitcher's Plate.—The "Sav-a-leg" home plate is best for most purposes. This plate, which is made of whitened rubber, has beveled edges of blackened rubber; and when the plate is set the edges are covered with dirt. The beveled edges eliminate the possibility of a player's spikes

catching as he slides across. A spike is screwed into the bottom of the plate close to each of its five corners and used for anchoring the plate to the ground.

The pitcher's plate, also of whitened rubber, comes in two styles:

1. The "Sav-a-pitch", which requires no spikes for setting. This style is six inches wide, six inches thick, and twenty-four inches long. The plate is set in the ground and can be turned when a side is worn.
2. Another standard pitcher's plate is six inches wide, three-quarters of an inch thick, and twenty-four inches long and requires three spikes that are screwed into the bottom of the plate and used for anchoring it into the ground.

Backstops are used to stop foul hit balls and wild throws. They are portable and can be taken from the playing field after batting practice. The frame is made of iron pipe, and the net fitted on to the frame should be waterproofed. A piece of canvas is attached to the net across the front of the backstop for reinforcing. The backstop has a small apron across its width to which the net and canvas are attached. This prevents low thrown or foul tip balls from going underneath. There are other types of backstops which are more expensive. The above, however, will suit the needs of most teams.

Baseballs.—Top grade baseballs have a rubber-covered cork center and are wound uniformly with wool yarn. The cover is alum-tanned leather, double stitched.

Fungo bats are especially built bats used to hit the ball in fielding practice. They are light and slender and usually made of ash. They are easily handled and should be a part of each team's equipment.

Ball Bags and Bat Bags.—Ball bags for carrying baseballs are of varying grades. The best bag is made of leather, will carry four dozen balls, and is equipped with lock and chain. A bag made of heavy duck material is cheaper and also is quite satisfactory.

Bat bags are made of a heavy cotton duck material, reinforced with leather. They have a carrying capacity of twenty-four to thirty-six bats.

Line Marker.—A line marker should be available to mark the foul lines, batter's box and coach's boxes. This is standard equipment in most athletic organizations and also can be used for marking football fields, track lanes and tennis courts.

Scorebook.—Each team should have a scorebook to keep the complete record of the season's play. The larger types have space to record as many as sixty-six games. The size of the book is chosen according to the number of games to be played.

Care of Equipment

All schools and colleges should have an equipment room where equipment can be stored when not in use. The storage space should be well ventilated, dry, and cool. Dampness will cause leather goods and other equipment to mold and deteriorate, while too much heat will shorten the life of materials.

An attendant is usually in charge, and during the playing season he cares for the repair and laundering of equipment. Clean undersocks, undershirts, and supporters should be available each day.

If the school does not have an equipment attendant, at the end of the season, the coach should assume the following responsibilities:

Leather Goods.—

1. Shoes should be treated with a good leather oil, such as neatsfoot oil, and a self-polishing shoe dressing applied. New laces and insoles should be put in the shoes and any necessary repairs made.
2. Catcher's and baseman's mitts should be cleaned with a good cleaner such as tetrachloride and oiled with a leather oil.

3. The ball and bat bags should be brushed and cleaned.
4. The pads on the masks should be repaired, cleaned, and oiled. If the frame of the mask is rusted, a coat of lacquer should be applied. Old head straps should be replaced.
5. Shin guards should be oiled and checked for broken straps and buckles.
6. New baseballs should be stored in their original cartons.

Other Equipment.—

1. Uniforms, jackets, caps, outer socks, wool shirts, and sliding pads should be dry cleaned and moth-proofed for storage.
2. The chest protector should be dusted and brushed with a wire brush and the worn straps replaced.
3. All cotton articles such as T shirts, undersocks and sweatshirts should be laundered.
4. Bases should be dusted, brushed with a wire brush, washed, and cleaned.
5. Backstops should be cleaned and painted, and nets repaired and stored.
6. Home plate and pitcher's plate should be painted and stored.

All of the equipment should be stored neatly and placed in an accessible area of the equipment room.*

SCHEDULING OF GAMES

Most schools are in some league or conference, and games are usually scheduled at a meeting held well before the start of the season. Either the coach or his representative should attend. If a representative goes, he should follow out the wishes of the coach as closely as possible.

The major problem will be an agreement as to the dates of games. Each team in the league will play an equal

* Information on equipment through the courtesy of Rawlings Manufacturing Co., St. Louis, Mo.; A. G. Spalding & Bros., Chicago, Ill.; MacGregor-Goldsmit, Inc., Cincinnati, Ohio.

number of games at home and away. Games away from home involve travel expense, and school teams must consider time away from classroom work. Home games involve guarantees, expense of officials, maintenance, policing, advertising, and any other expenses involved in playing the game. These all must be considered so as to conform to the budget as closely as possible.

In scheduling nonleague or nonconference games the experience of the team as a whole is an important factor. Inexperienced teams should not be scheduled to play early games against competition beyond them. Winning the early games often gives inexperienced players confidence in their ability. If, however, the team is experienced, easy games make the players lax in their attitude.

The number of games played often depends on the material on hand. Teams having only two or three pitchers ordinarily will not be able to play as many games as teams having four or five. All teams, however, should be able to play an average of two to four games each week throughout the season.

PUBLICITY AND ADVERTISING

Newspapers

Good publicity, including advertising, is essential to an effective baseball program—at least, it is highly desirable. It does not need to involve money or any great amount of time, but it does require courtesy and a little foresight.

The newspaper story is the most common, and probably the best form of publicity. There are two types of newspaper stories—the straight account of each game after it is played, and what the newspaperman calls feature stories. These include the personality sketch, stories about unusual events, and other “color” items. Advance stories, which build up the coming games, are also important.

Ordinarily there will be little necessity to contact the local sports editor and get him interested; his job will bring him around, searching for material. Every courtesy should be

shown sports writers. Such items as batting and fielding averages and brief player biographies should be kept up to date. Individual full-face photographs of each player should also be available, if possible.

Most sizable colleges and professional teams will have some kind of athletic publicity man, and most of the standard information items should be channeled through him. If there is no publicity man, some volunteer may take over the duties—and frequently a local sports writer will help him get started.

Even the most efficient athletic publicity office, however, cannot take over all responsibility. The reporter will want to talk directly to the coach, and the coach should meet him half-way. Almost invariably, the professional reporter can be entrusted with off-the-record and confidential comment. The coach should ordinarily be frank and open with him, simply specifying the items he does not want printed. As a matter of principle, it is far better to tell a reporter the whole story and then put him on his honor, so to speak, than to be evasive. It is his job to dig out the truth, and if it has been difficult to find, he will take particular joy in printing it.

The writers for student newspapers call for somewhat different treatment than the professional—not because their ethical standards are different, but simply because they are green at the business. Frequently their knowledge of baseball will be slight (although they probably will not admit it!) and the coach should take this into consideration. With student reporters, it is advisable to set up interviews well in advance and hold them when there is plenty of time and reasonable privacy.

Most newspapers also have photographers who work with reporters, and they should be given the same consideration. If action pictures are taken during games, the coach or publicity man should get prints of the better shots and keep them filed. They may be useful later in developing feature stories. In the same way, a file of unusual events or bits of

color should be kept. They make good fillers, and might be a godsend to a reporter on a dull day. Always try to have a story for a writer when he calls.

Direct newspaper advertising is also an important form of publicity. Larger colleges and professional teams ordinarily buy advertising and chalk it up to expense, but in other situations money may not be available. Usually, however, some businessman can be found to foot the bill for an advertisement in the local paper. Pertinent information should be included—price, place, time, opponent, with perhaps a few background facts—and a mention made of the contributor who buys the space.

Radio

The working methods of the press and radio reporter are very much alike, and most of the procedures discussed above apply to radio as well. Sometimes a coach has a tendency to favor newspapermen, because he sees their work in print; it is extremely important, however, that he show no partiality. Often the radio sports man will want to interview the coach and various players, either "live" or recorded, and every attempt should be made to accommodate him.

Permission to broadcast radio accounts of the game is generally a matter for school authorities or other "top brass" to decide, and therefore out of the coach's hands.

One final fact in regard to both newspaper and radio men must be remembered: the coach should always be patient and go easy, even if he considers the man's work to be inaccurate and irresponsible. There is no point to starting a feud; the reporter has a far larger audience than the coach will ever have, and there is no way to keep him from writing or broadcasting. Make an effort to talk with him, be patient, and try to work out any misunderstandings on a friendly basis.

Posters

As a part of the publicity program, posters may be made up before the season's opening and placed in prominent loca-

tions around town. These should list the schedule, along with time and place of all games. Frequently a sponsor can be found for the printing bill, since the cost is low. Merchants will also cooperate in providing show window space in most cases, and a constant reminder of the baseball program will thus be before the public.

Desk Blotters.—Often desk blotters with advertising around the sides of the blotter and the schedule of the games in the center can be a means of raising funds as well as providing publicity. The advertising space that local merchants buy will pay for the cost of making up the blotters, and still leave a surplus.

Envelopes.—Some schools have the season schedule printed on their envelopes. These are used on all mail that is sent out from the department of athletics. A letter bringing out the essential facts concerning the coming season also may be sent to people who are known to be much interested in baseball. Such folk will talk it up, which always helps.

Schedule Cards.—Pocket schedules, a miniature version of the posters described above, also will prove handy. Some business people will be glad to send schedules out in their mail, while others will place them in an easily accessible location in their store so that any one who cares to can take one.

MAINTAINING THE FIELD

The field should be kept in good shape for practice as well as game play. Grass on the infield and outfield should be kept cut, the dirt runways dragged and rolled daily, the pitchers mound and home plate area smoothed and tamped. Whenever needed, the field should be watered. It need not be lined for practice days except when required for a specific drill.

Schools having maintenance crews have them care for the field and usually charge the expense to baseball.

HOME GAME PREPARATIONS

The field is prepared for game day as for practice with the additional marking of all required lines. After hitting and fielding practice, the runways are again dragged, the pitchers mound and home plate area smoothed and tamped, and the batter boxes are re-lined.

Officials.—Both coaches should agree on the officials chosen to work the game. It is better to pay a slightly larger fee for individuals who are experienced, efficient, and control the game at all times, than to try and save money by having someone officiate who may not do an effective job.

Policing.—Police should be assigned to maintain order. The number assigned depends on the attendance. The athletic director, business manager, or student manager informs them of their duties. In many cases, regular uniformed police will be provided without expense.

Tickets.—In smaller schools, the duties of ticket sellers and ticket takers are often handled by members of the faculty, while larger schools hire men for the purpose. These duties must be performed by reliable individuals to prevent any possible loss of receipts and the mishandling of tickets.

The man in charge acts as the business manager. A popular method in use is to check out a numbered roll of tickets to the sellers. The takers drop these tickets into a container, and after the game the number of tickets taken is checked against those sold.

Complimentary Tickets.—To maintain good will, it is advisable to issue complimentary tickets. Customarily all press representatives, members of the visiting team (through the coach), members of the faculty directly connected with the team, and certain persons connected directly or indirectly with the school and the home players should be given complimentary tickets. Players in their first year may be given two tickets. Those who have one previous letter or award may be given three, and those who have won two letters or awards given four. The captain may be awarded five or six tickets.

NECESSARY EXPENSES

Laundry

Clean laundry is vital to the welfare of the player, and is an item of expense that may easily be overlooked. Daily changes are essential for some items, and an account large enough to take care of all laundry should be budgeted.

Travel

The items of travel expense are listed and discussed in the section "Duties of the Manager" in Chapter 18, Team Organization.

Medical Expense

A sum should be set aside for possible medical expense. This can be estimated from the experiences of past years. More and more schools have insurance programs to cover such expenses; generally, this is both cheaper and more desirable.

Awards

Awards should be given to those players who have actually earned them. Conditions on teams will vary, but a sound policy to follow is to grant an award to all infielders and outfielders who play two-thirds of all major games. Pitchers are required to pitch a minimum of eighteen innings of major games, while catchers should catch at least one-half of all major games.

Two important individuals who are often overlooked are the coaches at first and third bases. They should be given credit for at least a half-game for each game in which they perform.

Some schools award a letter; larger institutions award both a letter and sweater the first year. Others give a choice of letter sweater, or jacket and letter the second year. In their last year, the player may have a choice of sweater, jacket, or blanket with letter award. The policy of the team involved will regulate the type of award granted, and money available, of course, will also be a factor.

CHAPTER 20

CONSTRUCTION AND CARE OF THE DIAMOND*

Almost any level spot of earth which is open to the sun and has room enough for running is likely to be used for a baseball field. Many players have learned their skills in the beginning in pastures or littered vacant lots. Many schools and small-town amateur teams can afford little more investment than bases and a little lime, and no more maintenance than an occasional once-over with a borrowed mower.

It is a fact, nevertheless, that the best baseball can be played only on good diamonds. Any group that sponsors a team will find that spending a moderate amount of money and a good deal of time pays off—in better baseball, in higher player morale and, if the gate is a factor, in greater attendance.

CHOOSING THE SITE

In choosing the site for a baseball diamond, the basic consideration is to keep the sun out of the batter's eyes. Diamonds built so that the sun is at the catcher's back throughout the game are generally considered best. This means that the first base line runs approximately from west to east, making right and right-center field the sun fields; or the third base line runs from approximately west to east, making left field and left-center the sun fields.

When either of these plans cannot be followed, the diamond may be placed so that the first base line runs approximately

* All diagrams for baseball field layout from Official Baseball Rules Completely Revised, 1951, through courtesy of Albert B. Chandler.

from south to north. If a game is played in late afternoon or in early season, a left-handed batter may be bothered by a low sun, as may the first baseman on high throws coming from the third base area.

DRAINAGE

A diamond that drains easily and well is of prime importance. Good drainage generally requires tile work, which can be expensive—particularly in terms of labor. It also requires skill. The subject is too complex for full treatment here; various publications of the Federal Government and state agricultural services are easily available. The following is only a rough outline of the specific requirements for a baseball field.

From four- to six-inch field tile is usually used. The tile is placed approximately eighteen to twenty-four inches below the surface at the base lines. The tile is laid approximately twenty feet apart, running parallel to either the first base or third base line. A tie-in line is run around the diamond and connected to a main line which carries water away from the field. The fall of the tile should be approximately one inch in ten feet.

The baseball rules state that the pitcher's plate should be fifteen inches above the base lines and the slope to the base lines shall be gradual. The tile should be placed on a bed of crushed rock two to three inches in depth. The rock should then be placed around and over the tile, covering it two to six inches. Rough cinders thoroughly dried out may be used if rock is not available. Fresh cinders contain acids, and these may kill the grass on the sodded or planted portions of the diamond.

Approximately ten inches of subsoil is placed on the rocks or cinders. The subsoil should not contain clay or other substance that will not permit the water to seep through. A good black loam top-soil is placed on top of the subsoil. In most northern and central states subsoil and top-soil can be obtained locally.

THE PITCHER'S MOUND AND BATTER'S BOX

The pitcher's mound and batter's box should be made up of a material that gives firm footing. Brick dust serves very well. This may be obtained from a brick yard at a very reasonable price, and in many cases for the cost of hauling. Some loam should be mixed in with the dust, wet weather causing the dust alone to be very slippery. The amount of loam used will depend on its texture, and various combinations must be tried to get the best results. Add loam or dust until the right consistency is obtained. Generally, a combination of three parts dust and one part loam, thoroughly mixed, is satisfactory.

Yellow or blue clay may also be used as the base material, varying from two parts to three parts clay to one part loam, depending on the consistency of the clay.

Different combinations of materials may be placed in small boxes and then analyzed for their consistency.

THE BASE PATHS

The base paths, or skinned area, of the diamond should be firm and of a dark material. Four parts of good black, local loam mixed with one part brick dust has proved satisfactory. If the loam has some clay mixed in, this ratio may have to be cut down. Moulders sand may be used in place of the brick dust, particularly if the loam has a tendency to harden and crack easily.

If peat is available, it is an excellent material to use in the mixture; it acts as a binder and at the same time gives a springy surface when wet down and rolled.

Several major league clubs in the past have used loam and cinders ground to a dust. This also makes a very satisfactory surface.

Because of the different textures of loam in different localities, it may be necessary to experiment and find the proper combinations of materials to fit the local situation. Loam can always be added if the runways are too soft, and ordinary

river sand can be added if they are too hard or crusty. The surface should always be a fine mulch to a depth of about two inches, which, with daily watering, dragging and rolling, will cause ground balls to hop true and accurately.

BASE AND PLATE PEGS

Base pegs and plate pegs should be placed in a firm, solid base. Concrete blocks may be placed under the bases low enough that the eyes of the pegs, when placed in the concrete, come just to the surface of the ground. The block for home plate should be placed so that the top of home plate is level with the surface of the ground when the pegs are set in the concrete.

Wooden blocks four to six inches in thickness may also be used to anchor the bases and home plate.

The same type of anchor may be used when a rubber slab is used as a pitcher's plate. When the Sav-A-Pitch pitcher's plate is used, no anchor is necessary, since this plate is six inches thick. Metal pipes may also be driven into the ground, so arranged that the pegs will fit into them.

SODDING AND SEEDING

The grass part of the field may be sodded or seeded. When sodded, the sod should be approximately two inches thick. Sodding, however, is much more expensive than seeding. In the midwest and central states a combination of 75 per cent blue grass, 15 per cent fescue, 5 per cent white clover, and 5 per cent perennial rye has been found to be a very satisfactory seed combination. In any other area, the State Agricultural Experiment Station will be able to furnish information as to the best type of seed to use.

The ideal time to seed in the midwest is between the middle of August and the middle of September, since the grasses root better in cool weather.

The outfield area should be well fertilized, rotted manure usually being used. This is plowed under, the ground then thoroughly disked and harrowed. If a culta-mulcher is avail-

able, the use of this machine will work the infield surface into an ideal seed-bed. The seed is then planted and again worked with the culta-mulcher or harrow, or the back of a rake may be used to turn the seed under. If there is sufficient rain to keep the seed moist, watering will not be necessary. For good drainage the outfield should have a fall of approximately one inch in twenty feet.

The infield is seeded in the same manner, but to avoid any possibility of tetanus infection, a good commercial fertilizer should be used.

This area should be kept moist until all the grasses come through. The rye may make its appearance in a few days, while the others should show in twenty-one to twenty-eight days. After firm germination and growth, a light mulch of one part black loam, one part sharp sand and one part peat should be used to fill in any slight depressions. The grass should be cut as often as needed; the best height is approximately one and one-half inches. The cut grass should not be raked but should be left as a mulch and fertilizer. In freezing areas the grass should be sprinkled daily until frost, then left alone.

During the spring the grass should be clipped to the depth desired and then rolled. During the season the grass should be watered as needed; it should always be moist, but firm enough that it will not tear up. With the combination of grasses mentioned a commercial weed killer can be used without harm.

Approximately every thirty days a light application of commercial fertilizer may be used to keep the grass in good condition.

MEASURING THE DIAMOND

In laying out a field, set home plate first, so the base lines run in the directions previously mentioned. If a surveyor sets up the diamond, he will know exactly how to proceed. If, however, the diamond must be set up without the help

of a professional surveyor, the individual who does the job will need a steel tape 100 feet long.

Set first base line from the back corner of home plate and measure 90 feet along this line. This is the back corner of first base. Next set a mark 127 feet, $3\frac{3}{8}$ inches from the back corner of home plate to the approximate location of second base. Measure 90 feet from first base, intersecting the line from home plate to second base. Run the third base line and measure 90 feet along this line to the back corner of third base. Measure 90 feet from this point, intersecting the lines from home plate to second base, and first base to second base. This will give the location of second base.

Stretch a string or cord from the back corner of home plate to second base. Measure along this line 60 feet 6 inches from the back corner of home plate. This is the front edge of the pitcher's plate. Set the plate so that it is parallel to a line between third and first base and so that the string bisects its center.

Check the distances from the back corner of first base to the back corner of third base. This should be 127 feet, $3\frac{3}{8}$ inches. Check the distances from the back corner of home plate to first base, first base to second base, second base to third base, and third base to home plate. These distances should be 90 feet between bases, and the angles between bases should be 90 degrees. The minimum distance from home plate to the fence or stands along either base line must be 250 feet to conform to the rules; a greater distance is preferable. The distance to fences or grandstand from home plate and the base lines should be at least 60 feet. This is not always possible, in which case local ground rules will have to be set.

Both the pitcher's plate and home plate must be of whitened rubber, home plate being beveled at the edges and placed even with the ground surface. The location of each plate has been previously mentioned. For the marking of the batter's box, catcher's lines, batter's circles, foul lines, three-foot line, and all other markings, refer to the accompanying diagrams. All lines should be of white lime or whitened material.

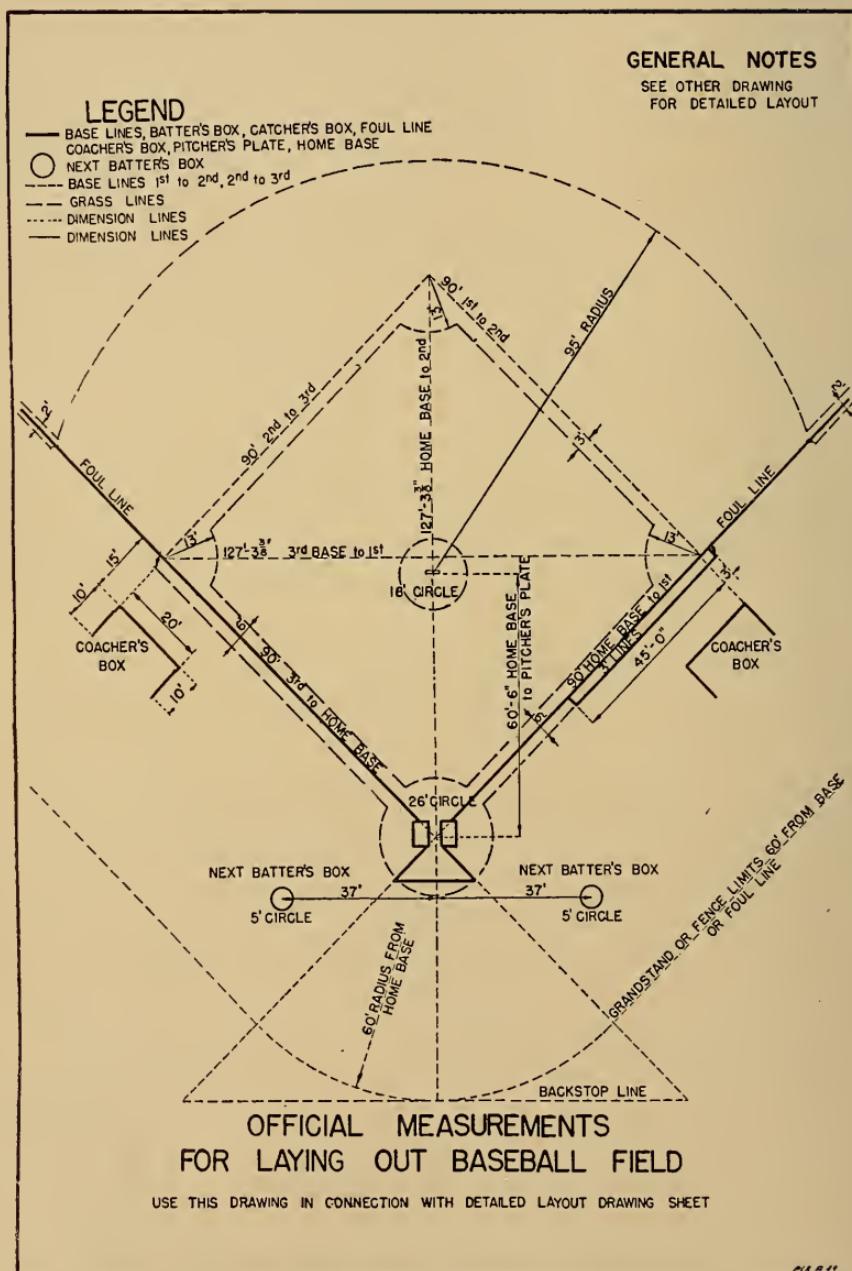


Fig. 148.

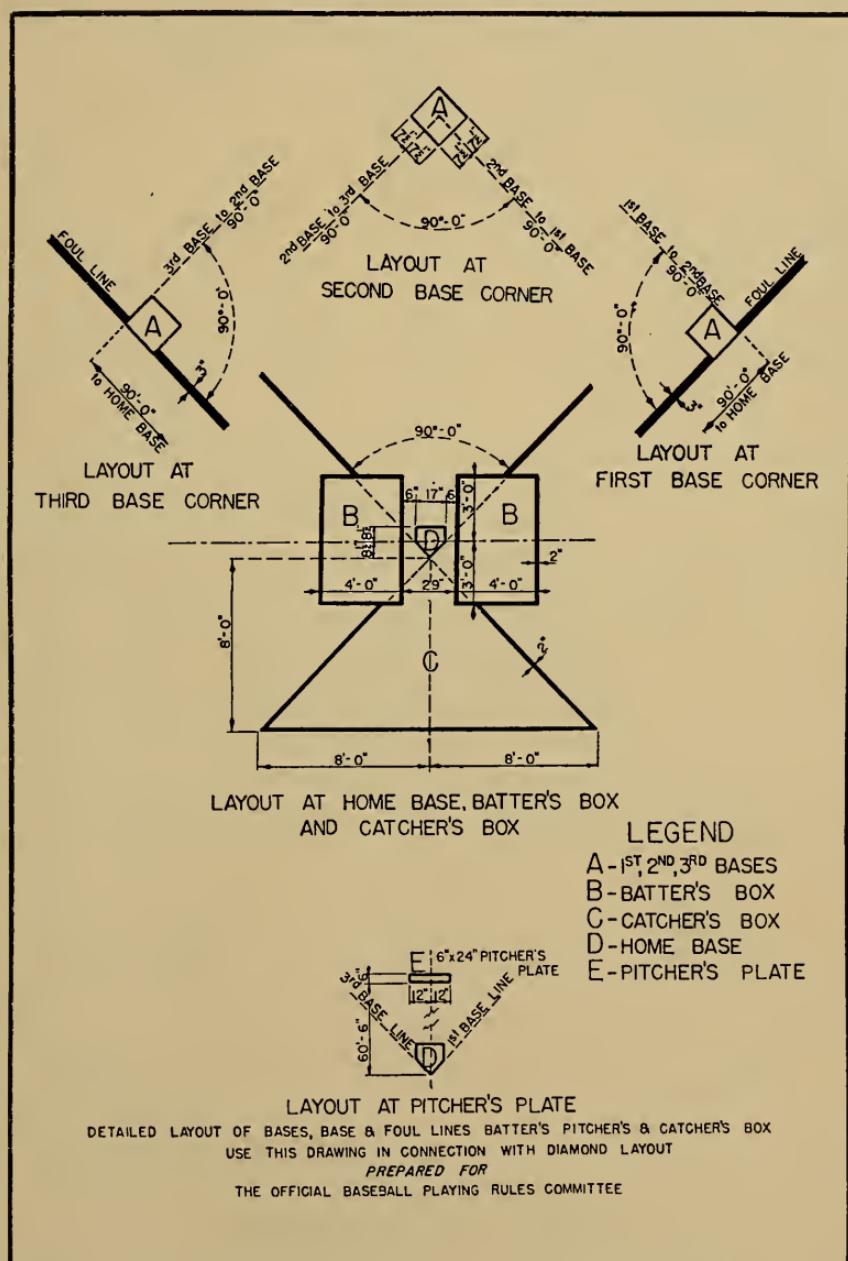
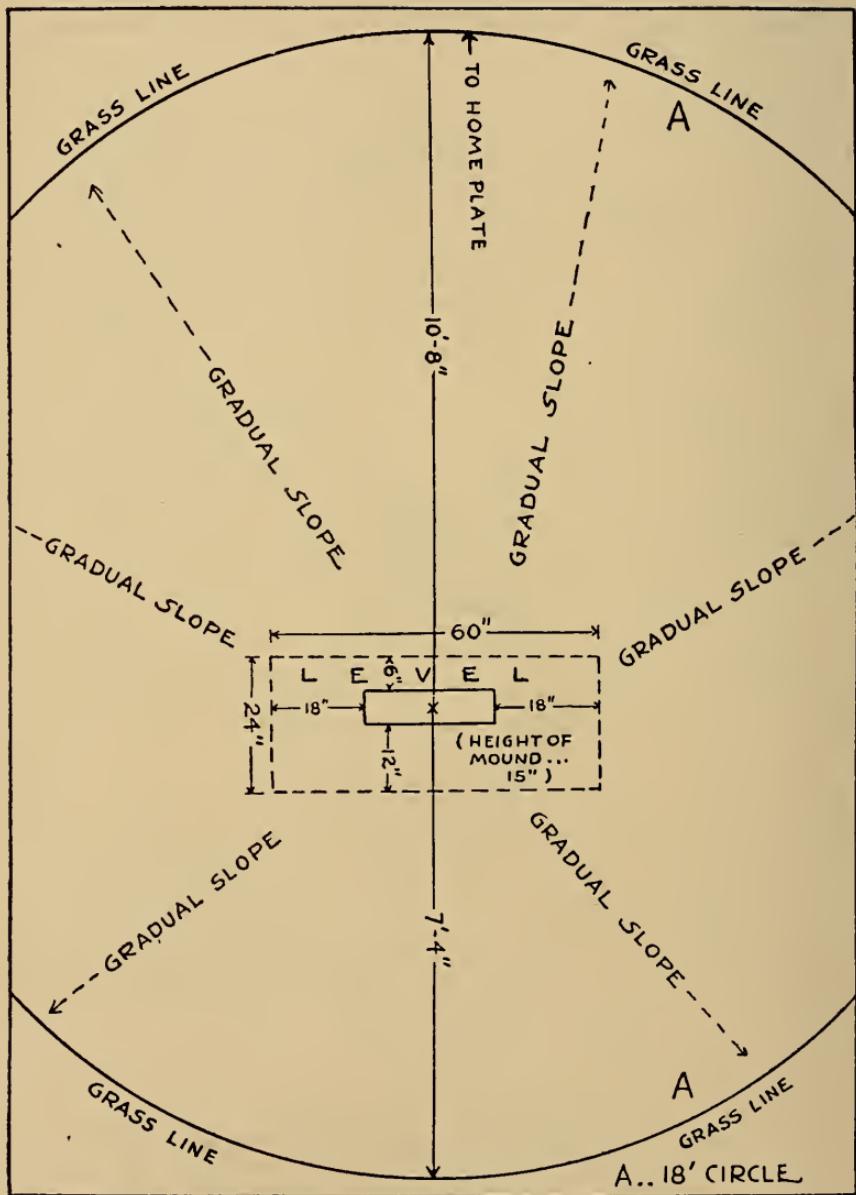


Fig. 149.—Detailed layouts.



OFFICIAL MEASUREMENTS
FOR LAYING OUT PITCHER'S MOUND

Fig. 150.

FIELD CONDITIONING AFTER RAIN

The ideal protection, of course, is a covering over the infield when rain threatens or occurs. However, in most cases, due to expense, a cover is not possible. If the rain has not been too heavy, the following procedure may be used.

Any low areas that contain water or excessively heavy moisture are drained by driving lengths of one or two inch pipes into the ground to a depth of five or six inches. This drains off the surface water immediately. These areas are then leveled off and dry dirt, which is kept under cover, is spread thinly over the area. Dry sawdust or sand may be used.

The dry material is raked in and more added. All other skinned areas are raked to a depth of $\frac{1}{4}$ to $\frac{1}{2}$ inch, provided the wet dirt does not roll up. Where the dirt rolls, gasoline is spread over this area and immediately lighted. Always be sure to carry all gas containers away from the area to be lighted. Light from the windward side by tossing a match on the gasoline. When several areas have to be treated, be sure the already lighted areas are cooled down and do not overlap, thus avoiding any possibility of a spark. As soon as all flame has disappeared the area is raked thoroughly. The heat generated helps very materially in drying out the ground. The diamond is then dragged with either a good sized steel or rubber mat.

Pitcher's box and the batter's box are thoroughly raked and tamped. Lines are re-marked and the field is ready for use.

PART IV RECORDS

CHAPTER 21

KEEPING CHARTS, RECORDS, AND NOTES

The success of a team depends on good pitching, hitting, and fielding, combined with the individual ability of its players to run fast and throw well. A combination of all the desired abilities is seldom found in an individual player. The importance of having all the abilities may be shown by the words of a major league scout who, after watching a highly publicized player for several days, sent the following telegram to his club: "Good field; no hit."

A coach, unless he has a good memory and is very observant in analyzing all practices, practice games, and games to the minutest detail, can help himself very appreciably by keeping charts, records, and notes on the players and their performances. Some of the observations will have to be made and recorded during a game or practice by someone appointed by the coach. Other observations are recorded by the coach himself either after the day's work is over or the next day before activities start. Over a period of years, the author has kept charts, records, and notes, occasionally writing short reports which are passed on to the players the next day.

Player Rating Charts

There are occasions when several candidates are competing for the same position. Keeping a chart which records the relative abilities of each player helps avoid the possibility of overlooking a fault or an asset. On the other hand, when only one player is available, a chart kept on him will show his weakness, strength, and the progress he makes.

The chart also is a quick answer when a player approaches a coach and asks, "What is wrong with my play? How can I improve?"

Each team will have its own player problems and charts should be varied to fit the abilities considered important. The player with the most ability is rated number 1; the next number 2. The figures are totaled and the player with the lowest total has the best all around ability. It should be noted that some abilities can be measured, while others are purely from observation. (Note: Frequently two players will rate the same in some respects and their charts will show the same number.) The samples on pages 368 and 369 can serve as models.

Game Charts

Some system of recording and analyzing a pitcher's performance, pitch by pitch, throughout the game can be very useful to both the pitcher and his coach. The author uses the system described below. It is relatively simple, cheap, and it tells the whole story. An assistant is stationed in the stands behind home plate. He keeps a separate stenciled card on each opposing batter, recording each pitch inside or outside the strike zone shown on the card (Fig. 151). The following symbols are used to record the pitches:

Type of pitch delivered to the batter: 1, a fast ball; 2, a breaking ball; 3, a change of pace.

Type of pitch hit for a base hit and to what field: **1H7**
The box indicates the batter reached base; in this case, by hitting a fast ball, 1; for a base hit, H; and to left field, 7, the direction of the hit.

Outs:

1P6

: fast ball popped to the shortstop for first out

2F8

: breaking ball flied to center field for second out

3G4

: change of pace grounded to second baseman—third out made on play

1K

: strike out on fast ball for first out

1L7

: fast ball lined to left fielder for second out

PITCHING

NAME	FAST	CURVE	CHANGE	OTHER PITCHES	CONTROL	POISE AND COURAGE	KNOWLEDGE OF BATTER WEAKNESS
a. Smith	1	2	1	0	2	3	1
b. Jones	2	1	2	Knuckle ball	1	1	1
c. Rogers	3	2	1	Screw ball	2	1	2

FIELDING	AGGRESSIONESSIVENESS	HUSTLE	EXPERIENCE	ALERTNESS	EFFECTION
a. 3	2	1	1	2	2
b. 2	1	1	1	1	1
c. 1	1	2	3	1	3

MOVE HOLDING RUNNERS ON BASE	HITTING	PER CENT	TOTALS
a. 2	1	.380	24
b. 1	2	.240	18
c. 2	3	.180	27

Note: If only one player is charted, show ability by excellent, very good, good, fair, poor.

Comments

Smith has tendency to become excited when under pressure. Loses control by trying to put too much on ball.

Jones does best work when under pressure.

Rogers because of aggressiveness will improve. Lacks experience to date.

Jones should use a curve, his best pitch in tight situations. He should continue to use his knuckle ball, developing it further.

Smith must work on fielding bunts, particularly to his right side. A tight game can be lost by the lack of this ability.

Note: From time to time the relative merit numbers will be changed as improvement is made by any of the pitchers.

SECOND BASE

NAME	HITTING	PER CENT	FIELDING OF GROUND BALLS	THROWING	SPEED	TAKING THE PIVOT		
a. Terry	2	.258	2	2	1	2		
b. Ross	1	.290	1	1	2	1		
c. Wilson	3	.250	3	2	3	2		
KNOWLEDGE OF THE GAME		EXPERIENCE	STARTING DOUBLE PLAY	AGGRESSIVENESS	HUSTLE			
a.	1	3	3	2	3			
b.	1	1	1	1	1			
c.	2	2	2	2	2			
POISE AND COURAGE		RELAYS	CUTOFFS	TOTALS				
a.	3	2	1	27				
b.	1	1	1	14				
c.	2	2	2	29				

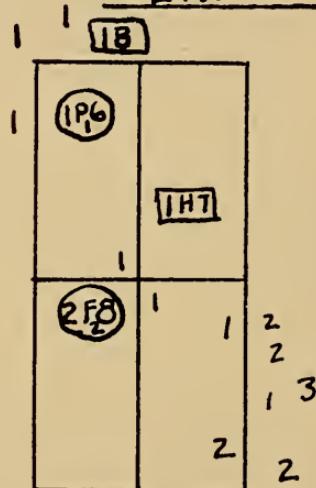
Note: When one player is charted, use excellent, very good, good, fair, poor.

Comments

Terry has trouble fielding ground balls hit to his right. He has an excellent knowledge of the game but due to lack of experience has a tendency to tighten up when under pressure, thus losing his poise. He can also hustle more.

Offensively, Wilson has trouble hitting a curve ball low and outside and a fast ball high and inside. His fault is overstriding. He should take a wider initial stance. Defensively, make up for lack of speed by anticipating plays. As the ball is pitched, take a short step or two forward so as to be moving when the ball is hit; also shift a step farther according to the type of hitter.

First Batter 7 Roberts Opp
Bats L.H.



At Bat - Pitches - Total

1	1 (1H7)	2
2	1 2 2 1 (18)	5
3	1 1 2 1 (1P6)	5
4	2 1 3 (2F8)	4
5		
6		
		16

Fig. 151.—Pitcher's performance record.

Other symbols:

1E6 : fast ball hit to shortstop who erred—batter-runner safe

1S : fast ball swung at outside of strike zone

2B : breaking ball for a base on balls

1HB : batter hit by fast ball

The small figure in the bottom of the circle indicates the number of the out made.

The card lists the player's number and name, and whether he bats right or left. As each pitch is made, its location with relation to the strike zone and what happened is recorded. The number of pitches and what they were is also recorded at the bottom of the card for each turn at bat. The total pitches are listed at the completion of each turn at bat.

If a pitcher is relieved, a notation is made and the relieving pitcher named. For example, the first batter No. 4 in his third time at bat hit against Smith, relieving pitcher, in the fifth inning. (This is shown on Fig. 152, since opponent's pitcher was relieved.)

Such a chart on each opposing player shows the following:

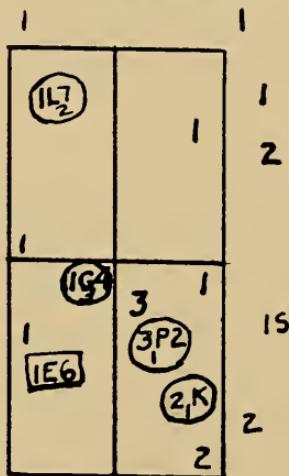
- What pitches did the opposition hit well or poorly;
- What pitches were missed and called strikes;
- The quality of the pitcher's control;
- The total number of pitches made;
- The type of pitches used.

Supposing a pitcher loses control and weakens in the late innings of a game. Did he deliver too many pitches? The average game should require no more than 110 to 120. However, when the charts are analyzed they might show the following:

The opposition got eight hits in the game, the pitcher averaging four pitches to each of these batters, or 32 pitches. Three bases on balls were given for an average of five pitches

First Batter 4 Brown Home
Bats

R.H.



At Bat - Pitches - Total				
1	1	15	1	3P2
2	1	12	12	(1L)
Smith relieved 5th	3	13	(1G)	
4	1	2	(2K)	
5	1	(1E)		
6				
				17

Fig. 152.—Home batter's performance record

each or 15 more. Two errors are made on batted balls, the pitcher delivering four pitches to each of these batters—8 more. For the twenty-seven outs, an average of four pitches are made to each batter or 108 pitches. Thus the total of all pitches is 163.

Not only is this a poorly-pitched game, but the pitcher has obviously weakened himself in the later innings because of too much work.

The charts are gone over by the battery who worked and, if another game is to be played, with the batterymen who are to work the upcoming game. The weaknesses and strong points of the opposing batters are discussed from what is shown on the charts as well as other observations.

Fig. 152 is the same type of card made up for each home player. This shows:

- (a) The type of pitch hit and the location of each pitch;
- (b) Where the opposition pitched to the batter;
- (c) The type of pitch called for a strike, or swung at and missed;
- (d) The number of pitches delivered to each batter.

Notes

Even though a discussion is held after the game or the next day with the players, it has been found advisable occasionally to write up a short summary of a game, giving the observed reasons for winning or losing as well as individual weaknesses. These observations should be taken down during the game and memos made. These should be thoroughly digested before the final analysis, since some that were taken during the game will turn out worthless, while a seemingly minor notation may be of importance.

For example:

1. "Sullivan was on first base but seemingly did not observe that the right fielder had a poor throwing arm. The ball was hit to the fielder's left for a base hit and Sullivan slowed down going into second base. By the time he recovered he was not able to advance to third base. Had he continued, he could easily have made third."

2. "Arlen struck out twice on low outside pitches with runners in scoring position. He must practice hitting more curve balls. It should be done continuously during the coming practices. Rogers swung at high inside fast balls. They were bad pitches."

3. "Bruce's curve ball was consistently low. It looked as though he was shortening his stride. He should try taking a slightly longer stride when this occurs."

4. "Our opponents were taking the first pitch throughout the game. Pitchers, get the first ball over for a strike when this occurs."

5. "We can play the hit-and-run effectively when the second baseman covers on all right-handed hitters as our opponents did yesterday."

The charts, notes, and observations will not necessarily win the ball game, but they are of value in giving answers to questions that may arise, as well as showing each player his shortcomings. When a player sees his efforts on paper, it seems to bear more weight generally than if the problem is merely discussed. The good points of young players should also be brought out to give them encouragement.

CHAPTER 22

KEEPING SCORE

Many people who know and like baseball do not know how to score the game—and these include, oddly enough, a good many players. The skill is fairly easy to acquire, and it is well worth the while of anyone with more than a passing interest in the sport to learn.

J. G. Taylor Spink, publisher of *The Sporting News*, and well-known authority on baseball, says, "A well-kept score-book represents a record that a score keeper can read the next day or years later, to refresh his memory on the complete story of any game." The symbols used in scoring look complicated at first glance, but scoring is easy to learn. The minimum number of letters and numerals should be used, yet the complete story should be told. Thus, the simpler the method used, the better.

One type of scorebook and score card has a space for each inning opposite the spaces for the name and the number of each player arranged to show the four bases covered by a base runner in scoring of a run. Another simply has squares blocked out for each inning opposite the spaces for the name and number of each player.

A newer type has larger spaces and certain symbols marked in the square that need only be checked when these plays occur. Regardless of the type of score book or score card, the same symbols can be used, and the score kept in a uniform manner. Some scorers start their record in the lower right hand corner of the scoring space for each runner, and carry the progress of the runner around the bases counterclockwise—the direction in which he travels.

Spink, who was official scorer of the World's Series for eleven consecutive years, uses a system that starts in the upper left hand corner, and moves clockwise in recording the

Blues (v) vs Reds (H) AT Chicago DATE 6/14/51

	Pos.	1	2	3	4	5	6	7	8	9	10	11	AB.R.I.B.S.B.S.H.P.O.A.E.
Roberts	7	0	1	0	0	0	0	0	0	0	0	0	4 1 1 0 0 4 0 0
Jones	4	0	0	0	0	0	0	0	0	0	0	0	4 1 2 0 0 3 1 1
Cline	8	0	0	0	0	0	0	0	0	0	0	0	3 0 1 0 0 2 0 0
Howard	9	0	0	0	0	0	0	0	0	0	0	0	4 0 3 0 0 2 0 1
Sullivan	3	0	0	0	0	0	0	0	0	0	0	0	4 0 0 0 0 6 1 0
Carlson	5	0	0	0	0	0	0	0	0	0	0	0	2 1 1 7 0 0 0 0
Arlen	6	0	0	0	0	0	0	0	0	0	0	0	4 0 0 0 0 1 3 1
Hayes	2	0	0	0	0	0	0	0	0	0	0	0	4 0 0 0 0 6 3 0
Bruce	1	0	0	0	0	0	0	0	0	0	0	0	3 0 1 0 0 0 1 0
McKinney for Bruce	9th	0	0	0	0	0	0	0	0	0	0	0	1 0 0 0 0 0 0 0
TOTAL		4	3	0	0	2	1	1	0	0	0	0	33 3 9 1 0 2 9 9 3

Bases on Balls... Bruce 11 Two-base Hits... 9, 4

Double Plays 6(A), 5(A) 3 Hit by Pitched Ball 5

Wild Pitches... Bruce 1 Struck Out... Bruce 111

Earned Runs... 2 Left on Bases... 5

Scorer... Johnstone Umpire... Wilson Dick

Home Runs... 0

Passed Balls... 0

Left on Bases... 5

Time of Game... 2:05

Fig. 153 Visiting team score sheet.

Reds (H)	VS	Blues (V)	AT	Chicago	DATE 6/14/51
Browne	4	2	3	4	5
Hand	6	1	3	7	8
Rogers	8	1	2	5	6
Smith	7	2	8	1	10
Clare	9	1	3	4	11
White	3	2	1	3	10
Kurt	5	1	1	1	20
Bender	2	1	1	1	20
Christoph	1	2	2	1	20
TOTAL					

Bases on Balls...Christoph...1..... Two-base Hits...7+..... Three-base Hits...Q.....
 Double Plays...2/4/3..... Hit by Pitched Ball A.....
 Wild Pitches...Q..... Struck Out...Christoph...1.....
 Umpire...W. J. L. Ditch...Scorer...J. H. K. T. R..... Left on Bases...7.....
 Home Runs...2+..... Passed Balls...Q..... Time of Game...2:Q.S.

Fig. 154.—Home team score sheet.

progress of a runner around the bases. Many sports writers also use this system. The upper left hand corner represents the runner's progress to first base, the upper right hand corner second base, the lower right hand corner third base, and the lower left hand corner home plate.

When the lineup is entered in the scorebook or on the scorecard, each position should be numbered. The standard numbering is as follows: pitcher (1); catcher (2); first baseman (3); second baseman (4); third baseman (5); shortstop (6); left fielder (7); center fielder (8); and right fielder (9).

SYMBOLS AND NUMBERS USED IN SCORING

While symbols are not as standardized as position numbers, the following are frequently used:

1 Base hit to center field

✓ Base hit to right field

✗ Base hit to left field

Note: numbers used are those of players involved in play.

5+ Infield hit

2+3 Bunt for base hit third base side

B+2 Bunt for base hit first base side

SH Runner advances on sacrifice hit

SB Stolen base

B Base on balls

H Hit batsman

WP Wild pitch

PB Passed ball

BK Balk

T Runner advanced on throw

X Runner advances to second or third unmolested

F Runner reached base on a force out

FC Fielders choice

8 Caught fly ball by center fielder

7L Caught line drive by left fielder
 9F Caught foul fly by right fielder
 4-3 Assist and out at first
 1-3 Sacrifice and out
2-4S Runner out stealing
 2-6P Pick off for out
 5 4 3 Double play

④ Unassisted double play

K Strike out
 K2-3 Dropped third strike, throw to first for put out
 6F Fumbled ball by infielder
 9F Foul fly caught by outfielder
 4P Pop fly caught by infielder
 5WT Wild throw by infielder
 7M Muffed ball by left fielder
 $\frac{H}{06}$ Runner out by batted ball
 $\frac{OB}{5}$ Runner out trying to avoid tag
 $\frac{I6}{0}$ Runner out interfering with fielder
 I6 Runner advances on interference by fielder
 • Runner advances on base hit
 MS Runner reached base on missed third strike
 R6-3-4 Rundown for out

How Symbols and Numbers Are Used:

Show a hit by a single line drawn in the direction in which the hit is made. If a single, enter in the first corner, representing first base; if a two base hit, enter in the second corner, and so on around the diamond. The corner in which the hit is entered indicates its length. Show a run scored by a dot in the center of the square. If an infield hit is made, place a cross in the square with the number of the defensive player who handled the ball under the cross bar. For example: a hit handled by the third baseman, but beaten out, is scored as **st**. If a bunt is a base hit, along the third base line, show the number of the fielder who fielded the ball,

followed by a cross, followed by a B, as ~~2T~~¹_B. In this case the catcher fielded the ball. If it is a bunt for a base hit along the first base line, show the symbol as ~~B~~^T₂.

On any fly ball that is caught, the number of the player catching the ball is used to show that he made the out; the type of batted ball caught is indicated by letter.

On ground balls, 4-3 indicates a grounder hit to the second baseman who fields the ball and throws the runner out at first base. The figure 4 indicates that the second baseman made an assist; the figure 3 shows the first baseman made the put-out. 3G—grounder to the first baseman which he fielded to make the put-out unassisted. 1-3—grounder to the pitcher who fields the ball and throws the runner out at first base. When underscored 1-3 the underscoring indicates that a sacrifice bunt was fielded and thrown to first base for the out—in this case, pitcher to first baseman. 6-4 is a force-out at second base, shortstop to second baseman. 2-4S shows the catcher threw to the second baseman who tagged the runner stealing. 2-6P shows the catcher threw to the shortstop for a pick off at second base. (Note that when only one number precedes the P, a pop fly is indicated.) ~~5/4~~¹₃ is a double play, third baseman to second baseman to first baseman. A circle with a number inside, 4, is an unassisted double play—in this case the second baseman made the play. K indicates a strike-out, the catcher receiving credit for a put-out; K2-3 shows that the strike-out was made, but the catcher dropped the ball and had to throw to first base for the put-out. The pitcher gets credit for a strike-out, the catcher an assist and the first baseman the put-out. When an F follows an infielder's number, as 6F, the letter shows the shortstop fumbled the ball and the runner reached base. Note that the F following the left or right fielder's number indicates that either caught a foul fly, while P following an infielder's number indicates he caught a pop fly. 5WT shows that the runner reached base on a wild throw by the third baseman. 7M indicates that the left fielder "muffed" the ball, and a

runner reached base. $\frac{H}{06}$ shows that the runner was hit by a batted ball; and the closest fielder, in this case the shortstop, is credited with the put-out. $\frac{OB}{5}$ shows that a runner is out for running out of the theoretical three-foot lane between bases to avoid being tagged. In this case, 5 is credited with the out since the runner attempted to avoid the third baseman. $\frac{I6}{O}$ indicates that the runner is out for interfering with the shortstop in his attempt to field a batted ball, while I6 without the circle underneath indicates that the runner advanced a base because of interference by the shortstop.

In all cases when a runner advances a base or a play is made, a symbol indicating the advance or play should be shown in the proper space. For example: if a runner advances a base because of a base hit by the next succeeding batter, a dot is placed in the corner representing the base to which he advances. If he advanced because of a base hit by any other batter, the number of the player follows the dot thus: • 6, showing that the runner advanced because of a base hit by the shortstop. MS indicates that a runner reached base because the catcher missed the third strike, the catcher also being credited with an error. R6-3-4 shows a rundown in which the shortstop, first baseman and second baseman took part, the second baseman receiving the put-out. A line drawn along the right side of a square or along the base of a square indicates the end of an inning.

In any situation in which a symbol may not be available, a marginal note should be made on the score sheet.

To facilitate the totaling of the box, giving the times at bat, runs, hits, etc., a dot can be placed in the proper square at the time the situation occurs. For example: if a batter has a time at bat and scores a base hit, a dot is placed in the At Bat column and another in the Hit column. Then all that is needed at the end of the game is a count of the number of dots in each square. To get the correct number of the men left on bases and prove the box scores, add:

The team's official times at bat

bases on balls

hit batsmen

interference with batter

sacrifices

then subtract:

runs scored

number of put-outs of opposing team.

The difference is the number of men left on base. The totals are then added and should be equal, thus proving the box score.

A Theoretical Game

At the beginning of this chapter are the score sheets of a theoretical game. The box score on the right side of the sheets shows the totals of both offensive and defensive play. The progress of the base runner is marked counterclockwise, and starts at the center of the bottom of the squares, a method frequently used by scorers. The first three innings will be described as a guide for scoring, the remainder of the game summarized.

First Inning, First Half

Roberts, number 7, the left fielder and first man at bat, singled to left field. This is shown in the square opposite Robert's name, by a straight line drawn in the lower right-hand corner in the direction of left field. Jones, the second baseman, number 4, hit a pop fly to the shortstop: 6P. Credit Hand of the home team with a put-out. The first out is shown by the figure 1 in the center of the box opposite Jones' name. Cline, number 8, the center fielder, singled to right field. Roberts advanced from first to third base on the single. .8 is shown in the upper left hand square opposite Roberts' name, showing he advanced to third base on the hit. Howard, number 9, the right fielder, singled to left field, Roberts scoring. Roberts' score is indicated by the dot in the center of the square, while the .9 in the lower left-hand corner shows that Howard drove in the run. The • alone in the upper

right-hand square opposite Cline's name shows he advanced to second base on Howard's hit to left field, Howard being the next succeeding batter. Sullivan hit into a double play, shortstop to second baseman to first baseman $6/4 \setminus 3$. 6-4 also is placed in the upper right-hand corner of the square opposite Howard's name, showing it was a force-out. Credit Hand with an assist, Brown with a put-out and an assist, and White with a put-out. Show $6/4 \setminus 3$ on the space for double plays at the bottom of the page. The figure 2 in the center of the square opposite Howard's name shows he made the second out. A figure 3 in the center of the square opposite Sullivan's name shows he made the third out. The heavy line on the right-hand side of the square opposite Sullivan's name indicates the end of the inning. In the total column at the bottom of the page, the top space shows there were three hits, and the lower space, one run.

Three hits, one run, no errors.

First Inning, Last Half

Brown, the second baseman, reaches first base by being hit by a pitched ball, H. No time at bat is credited to him. Hand sacrificed Brown to second base 2-3. Credit Hayes with an assist and Sullivan with a put-out. The sacrifice is not a time at bat, but Hand is credited with a sacrifice hit. Rogers singled to left field, scoring Brown. Credit Rogers with a time at bat and a base hit. Smith flied out to center field, 8, for the second out, Rogers holding first base. Credit Smith with a time at bat, and the second out. Cline is credited with the put-out. Clare, the next batter, hit to the shortstop, Arlen, who threw to Jones for the third out, a force-out 6-4. Credit Arlen with an assist and Jones with a put-out. Total one hit and one run at the bottom of the first inning for the home team. One hit, one run, and no errors.

Second Inning, First Half

Carlson, the third baseman, number 5, reached first base on a base on balls shown by a B in the lower right-hand corner. Credit a base on balls to Christoph at the bottom of

the page. Arlen, the shortstop, number 6, hit a slow ground ball to the third baseman and was thrown out at first base 5-3. Credit Kurt with an assist, White with a put-out. Carlson advanced to second base on the play. Hayes, the catcher, number 2, grounded out to the second baseman, 4-3, Carlson advancing to third base on the play. Bruce, the pitcher, struck out, indicated by a K in the lower right-hand corner. Credit Bender with a put-out and Christoph with a strike-out. No hits, no runs, no errors.

Second Inning, Last Half

White, the first batter, bunted the ball on the third base side of the diamond $\frac{2}{T}B$. It was fielded by the catcher, but too late to make a put-out. Credit White with a time at bat and a base hit. Kurt played the hit-and-run, hitting to right field, White advancing to third base on the hit. Credit Kurt with a time at bat and a hit. Bender hit a fly ball to Roberts, who immediately threw to home plate in an effort to retire White, Kurt advancing to second base on the throw-in. Show the first out and time at bat for Bender; a figure T in the second corner for Kurt and a 2 in the fourth corner. A dot in the center of White's square indicates the run scored. Christoph popped out to the catcher, 2P. Credit Christoph with a time at bat and Hayes with a put-out. Brown flied out to Howard. Credit Brown with a time at bat and Howard with a put-out. One hit, no runs, no errors.

Third Inning, First Half

Roberts hit a line drive to the center fielder, 8L. Credit Roberts with a time at bat and Rogers with a put-out. Jones hit a three-base hit into right field, indicated by the line drawn in the upper left-hand corner. Credit a time at bat and a hit to Jones in the box, also credit a three-base hit to 4 at the bottom of the page. Cline hit a long fly ball to the left fielder, Jones scoring after the catch.

An 8 is marked in the lower left-hand corner opposite Jones' name, showing Jones scored on Cline's out. A dot is

placed in the center of the square opposite Jones' name, for the run scored. Show the second out in the center of Cline's square as well as a time at bat for him. Howard hit a two-base hit into left field, shown by the line drawn in the upper right-hand corner in the direction of left field. Credit the time at bat, and the base hit in the box at the right. Credit a two-base hit to Howard, number 9, at the bottom of the page. Sullivan flied to left field, shown by the 7 placed in the lower right-hand corner opposite Sullivan's name. Record the time at bat for Sullivan and a put-out for Smith. Two hits, one run, no errors.

Third Inning, Last Half

Hand hit a ball at the shortstop, which he fumbled, 6F. Credit Hand a time at bat and Arlen with an error. Bruce made a wild pitch, WP, and Hand advanced to second base. Credit Bruce with a wild pitch. Rogers struck out, K. Credit Bruce with a strike-out and Rogers a time at bat. Smith hit a two-base hit into left-center field. Credit a hit and a time at bat in the box, a two-base hit at the bottom, and show in Hand's box that his run was batted in by 7. Clare popped out to the first baseman, 3P. Clare is credited with a time at bat and the second out, while Sullivan gets a put-out. White hit to the pitcher, who threw him out at first base, 1-3. An assist goes to Bruce, a put-out to Sullivan, and a time at bat to White.

One hit, one run, one error.

Fourth Inning, First Half

Carlson was hit by a pitched ball, H. Arlen hit a fly ball to Clare, 9. Hayes was at bat when Carlson stole second base, SB. Carlson advanced to third base on a wild pitch, WP. Hayes hit a ground ball to Hand who fumbled, 6F, Carlson scoring. Bruce singled to center, Hayes advancing to second. Roberts flied out to Clare, 9. Jones grounded out to first base, 3.

One hit, one run, one error.

Fourth Inning, Last Half

Kurt singled to left, Bender flied out to Roberts, 7. Christoph struck out, K. Brown lined to Roberts.

No hits, no runs, no errors.

Fifth Inning, First Half

Cline reached first on interference by the catcher, I-2. Howard hit a ground ball that hit Cline $\frac{H}{04}$. Sullivan hit to Kurt, who started a double play, Brown to White, $5/4 \setminus 3$.

No hits, no runs, no errors.

Fifth Inning, Last Half

Hand reached first on a muffed fly by Howard, 9M. Hand gets too long a lead and is picked off by Bruce. In the rundown, Sullivan, Arlen, and Jones handle the ball, Jones making the put-out, R 3-6-4. Rogers walked, B, Smith flied to Cline, 8. Rogers attempted to steal and was thrown out, Hayes to Arlen 2-6S.

No hits, no runs, one error.

Sixth Inning, First Half

Carlson singled to center. Arlen sacrifice bunted in front of Bender, who threw to Brown for the force-out, 2-4. Hayes hit a line drive to White, who doubled Arlen off first (3).

One hit, no runs, no errors.

Sixth Inning, Last Half

Clare singled to right. White sacrificed Clare to second. Kurt flied to Howard, 9, White taking third on the play. Bender struck out, K.

One hit, no runs, no errors.

Seventh Inning, First Half

Bruce grounded to Christoph, who threw to White for the out, 1-3. Roberts struck out, K. Jones doubled to right

field. Cline hit a ground ball to White, who threw to Christoph for the out at first base.

One hit, no runs, no errors.

Seventh Inning, Last Half

Christoph popped up to Arlen, 4P. Brown singled to left field. Hand grounded out, Jones to Sullivan, 4-3. Rogers flied out to Roberts, 7.

One hit, no runs, no errors.

Eighth Inning, First Half

Howard lined out to Smith, 7L. Sullivan hit a ball in front of the plate and was thrown out at first base by Bender, 2-3. Carlson popped out to Bender, 2P.

No hits, no runs, no errors.

Eighth Inning, Last Half

Smith grounded out, Arlen to Sullivan, 6-3. Clare grounded to Jones who threw wild to Sullivan, 4WT, Clare taking second base. White struck out. Kurt walked, B. Bender hit a home run into left field, scoring Clare and Kurt ahead of him. Christoph struck out.

One hit, three runs, one error.

Ninth Inning, First Half

Arlen flied out to Rogers, 8. Hayes grounded out to Kurt, 5-3. McKinney batted for Bruce and flied out to centerfield, 8.

No hits, no runs, no errors.

Proving the box score:

Home team	Add	Visiting team
31	Official total times at bat	33
2	Bases on balls	1
1	Hit batsman	1
2	Sacrifices	0
—	Equals	—
36	Runs	35
6	Opponent's put-outs	3
24	Left on bases	27
6		5
—		—
36		35

To promote uniformity in scoring, the Official Baseball Guide includes instructions for the guidance of scorers and fans who desire to keep their own score. These should be thoroughly studied by each official scorer. Some of the following excerpts are quoted directly, others paraphrased.

GUIDES TO HELP THE SCORER IN HIS DECISIONS

Base Hits

1. Always give a base hit when exceptionally good fielding of a batted ball fails to result in a put-out. Give the batter the benefit of the doubt.
2. Do not score a hit when an infield batted ball results in another runner who is attempting to advance one base being retired, whether forced out or not.
3. Do not score a hit if a legally-batted ball into fair territory could have been handled with ordinary effort.
4. It is a base hit and the ball is dead when a legally-batted ball hits the clothing or person of an umpire or runner before a fielder has an opportunity to field the ball, except when a runner is called out for having been struck by an infield fly.
5. Credit a base hit if a ball is hit so hard, or so slowly, that the pitcher or fielder attempting to make a play has no opportunity to do so.

Extra Base Hits

A batter shall be given credit for only as many bases as he safely attains. If he overslides second base and is tagged out, he shall be credited with a single; if third base, a two-base hit. If, however, he runs past a base after reaching it, then attempts to return to that base and is tagged out, he shall be credited with as many bases as he actually touched in legal order.

A batter is credited with a home run when he hits the ball out of the playing field and touches all the bases in legal order. All runs of other runners who were on base when the home run was hit, count in the final score, even though one

run itself would have ended the game. On all hits other than a home run, the batter is credited with only as many bases as are advanced by the runner who scores the winning run, and then only if the batter runs out his hit and touches the bases in legal order.

Sacrifice Hits

Score a sacrifice if, with less than two outs, the batter advances one or more runners with a bunt and is retired at first base or would have been retired except for a fielding error. It is not a time at bat. If, however, a preceding runner is forced out on the bunt, it is a time at bat and not a sacrifice. It is also a time at bat and a base hit if the batter is played and reaches first base safely without error. (The batter must make an intentional effort to bunt the pitched ball; a ball swung at and tapped, or a ball that hits the bat as a player attempts to dodge a pitch, is not credited as a sacrifice.)

It is a squeeze play if the batter scores a runner by a bunt, and is not scored as a time at bat.

Infield Fly

If, with less than two outs while first and second bases or all three bases are occupied, the batter hits a fair fly ball, other than a line drive, that in the judgment of the umpire can be reasonably caught by an infielder, the umpire should call the batter out, but the runners may advance at their own risk, the same as on any other fly ball. Should an outfielder place himself in the infield he shall, for the purpose of the infield fly rule, be considered an infielder.

If a runner, while standing on the base, is hit by a fair hit fly ball he shall not be called out, but the ball is dead and the batter is called out. If, however, a runner is off base and is hit by a fair hit fly ball both he and the batter should be called out, and the ball declared dead.

In the above situations, an attempted bunt which results in a fair fly ball shall not be considered an infield fly.

Runs Batted In

Score a run batted in to the batter when a runner scores because of:

1. A safe hit.
2. A sacrifice hit.
3. An infield or outfield put-out.
4. Being forced over home plate.
 - (a) By reason of the batter being struck by a pitched ball.
 - (b) By a base on balls.
 - (c) By reason of the batter being awarded first base because of interference by the catcher.

Do not score a run batted in if a runner scores when the batter hits into a force double play or when the first baseman fields a fair hit ground ball, retires the batter himself at first base, and then throws to second or third base retiring another runner who has to be tagged for a double play.

On any other plays, when in doubt, credit the batter with a run batted in if a runner continues on his way to score after the ball has been fairly hit, or caught, and no error is made on the play. Give the benefit of the doubt to the batter.

Automatic Put-outs

1. The catcher is credited with an automatic put-out when the umpire calls the batter out:
 - (a) For an illegally-batted ball.
 - (b) For bunting a third strike foul (also credited as strike-out to pitcher, unless a foul fly is caught by a player).
 - (c) For being struck with his own fairly batted ball.
 - (d) For interfering with the catcher.
 - (e) For batting out of turn.
2. An infielder is credited with an automatic put-out when the umpire calls:
 - (a) The batter out on an infield fly which is not caught, the put-out being credited to the infielder who, the scorer believes, could have made the put-out.

- (b) The runner out for being hit by a fair ball (including an infield fly), the nearest infielder to the ball being credited with the put-out.
- (c) The runner out for running out of line to avoid being tagged by the ball in the hands of a fielder, the fielder being credited with the put-out.
- (d) The runner out for interfering with a fielder. Credit the fielder with the put-out.

When the runner interferes with a fielder's attempted throw, credit the fielder with an assist, and a put-out to the fielder for whom the throw was intended.

Assists

Credit an assist to each player who throws or deflects a batted or thrown ball in such a way that a put-out results or would have resulted, except for a subsequent error by a teammate. Only one assist, however, shall be credited to each player who throws or deflects the ball in a rundown which results in, or would have resulted in, a put-out except for a subsequent error.

Example: The third baseman goes to his left in an attempt to field a ground ball. He deflects the ball, the shortstop recovering it. The shortstop throws out the batter-runner at first base. Credit the third baseman and shortstop each with an assist.

Example: When a runner attempts to steal a base and the catcher overthrows, credit a fielder who backs up the play with an assist, providing he throws out the runner as he attempts to advance an extra base.

Errors

1. Do not credit the catcher with an error on example 2, since an error is scored only when each misplay (fumble, muff, or wild throw) prolongs the time at bat of a batter, or prolongs the life of a runner, or permits a runner to advance one or more bases when perfect play would have resulted in the batter or runner being retired. The runner did not advance an extra base on the misplay nor was his play prolonged.

2. Do not credit an error if a runner or runners advance because of the pitcher making a wild pitch or because of a passed ball. Do credit an error and a strike-out to the pitcher, if the batter swings at a wild pitch for his third strike and thereby is enabled to reach first base, except that if a run scores it shall be disregarded as an error, and considered as a wild pitch in computing earned runs. When the catcher muffs a third strike, thereby permitting the batter to reach first base, credit the catcher with an error, and the pitcher with a strike-out. In this case the pitch is not considered a passed ball.

3. Only when the scorer is convinced that a wild throw permits a runner to advance one or more extra bases after an attempted steal or advance of a base shall an error be credited to the player who made the throw.

4. Credit an error against any player who received the ball in ample time for a force play, and fails to retire either a runner or the batter.

5. An error shall not be charged against a fielder if, after he drops a line drive, fly ball, or thrown ball, he retrieves it in time to force out a runner at another base.

6. Even though an accurate throw strikes a base runner or an umpire or takes an unnatural bounce, especially from the outfield, the player making the throw shall be credited with an error provided the runner advances.

Stolen Bases

1. Credit a stolen base to a runner when he advances a base unaided by a base hit, a put-out, a force-out, a fielder's choice, a passed ball, a wild pitch, or a balk. If a double or triple steal is attempted and one runner is thrown out before reaching and holding the base he is attempting to steal, no other runner shall be credited a stolen base.

Example: Runner A on first base attempts to steal second base. Runner B on third base scores while play is being made on runner A who is later put out. No stolen base is credited to B.

2. A runner who overslides a base and is touched out shall not be credited with a stolen base.

3. A stolen base is credited:

- (a) To a runner who advances a base while another runner who is attempting to steal is caught in a rundown and returns successfully to the base he originally occupied.
- (b) To a runner who has started for a succeeding base before the pitcher delivers the ball, and a wild pitch, or passed ball, occurs. If another runner advances because of the pitch, the wild pitch, or passed ball, shall also be scored.

Do not credit a stolen base to a runner if the defensive team is indifferent to his advancement.

Strike-outs

If a batter leaves the game with two strikes against him, and a substitute batter completes a strike-out, credit the original batter with the strike-out. In any other case, credit the substitute batter with the action that occurs as he completes the turn at bat.

Earned Runs

The pitching is held accountable for all earned runs. No run can be earned which scores as a result of a batter having reached first base safely because of an interference by the catcher or any fielding error, except in the case of a wild pitch on which the batter reaches first base. This is the pitcher's fault, and only in computing earned runs is the error disregarded. Earned runs are scored when a player reaches home base by the aid of:

- (a) Safe hits.
- (b) Sacrifices.
- (c) Stolen bases.
- (d) Put-outs.
- (e) Bases on balls.
- (f) Hit batters.
- (g) Balks or wild pitches (even though a wild pitch be a third strike which enables a batter to reach first base), before fielding chances have been offered to retire the offensive team.

Benefit of Doubt

When a fielding error is committed, give the benefit of the doubt to the pitching in determining to which bases any base runners would have advanced had the fielding by the defensive team been errorless.

Changing Pitchers

1. When pitchers are changed during an inning and any bases are occupied, the preceding pitcher, and not the relieving pitcher, shall be charged with any earned or unearned runs scored by any runner or runners on base when the relieving pitcher entered the game. There is, however, this exception: if the action of any batter to whom the relieving pitcher pitches results in the retirement of a runner left on base by a preceding pitcher, the batter whose action resulted in the retirement of that runner shall be considered as having been left on base by the preceding pitcher and any run scored by such runner shall be charged to the preceding pitcher.

2. If a batter has a decided advantage because of ineffective pitching by a preceding pitcher, the relieving pitcher shall not be held accountable if the batter reaches first base safely.

Example: Relieving pitcher takes over with the count two or three balls and one or no strikes or three balls and two strikes. The batter reaches first base safely. Charge that batter to the pitcher who was replaced. If, however, the batter is retired, or would have been retired except for a fielding error, credit the relieving pitcher with the batter. Credit the relieving pitcher if the batter hits into a force-out, or into a fielder's choice on which a runner is retired or who would have been retired except for a fielding error.

When the count is one and one or less, the relieving pitcher shall be held accountable for any action of the batter.

Crediting a Win or Loss to a Pitcher

Careful consideration must be given to the winning and losing pitcher when two or more pitchers take part in a game. Keep the following points in mind:

1. Do not give the starting pitcher credit for a game won even if the score is in his favor, unless he has pitched at least five innings when replaced. This is effective for all games of six or more innings. If, in a five inning game, the starting pitcher is replaced before pitching four complete innings when his team is ahead, remains ahead to win, and more than one relief pitcher is used by his team, the scorer shall credit the victory (as among all relieving pitchers) to the pitcher whom the scorer considers to have done the most effective pitching.

2. Regardless of how many innings the first pitcher has pitched, he shall be charged with the loss of the game if he is replaced when his team is behind in the score, and his team thereafter fails to either tie or gain the lead.

3. If a starting pitcher is removed for a substitute batter or substitute base runner in any inning after pitching at least five complete innings, and during the inning in which he is removed his team assumes the lead, he shall be credited with the victory if his team remains ahead until the finish of the game.

Example: Pitcher A is removed in the first half of the sixth inning for a substitute batter. His team gains a lead in that inning. Pitcher B takes the mound in the last half of the inning and holds the lead through the last half of the ninth inning. Credit pitcher A with the victory.

Example: Pitcher A of the team last at bat is removed in the last half of the fifth inning for a substitute batter, or substitute runner. His team gains the lead in that inning. Pitcher B, the relieving pitcher, holds the lead through the ninth inning. Pitcher A is credited with the victory since he pitched five complete innings and his team gained the lead before pitcher B took up the pitching duties. Had the score been tied at the end of the fifth inning, pitcher B would be credited with the win or loss.

When a pitcher is removed at the end of an even inning before the final inning of a game, and his team is behind at the time, then takes the lead in the first half of the final inning and wins, credit the retiring pitcher with the win. When this occurs earlier, credit the pitcher with the win who worked best. When in doubt, credit the pitcher who worked the most innings.

When a pitcher starts an inning and is relieved before the completion of the inning, he receives no benefit of runs that are later scored by his team.

4. In crediting a pitcher with the number of innings pitched, add the total of opponent's outs pitched and divide by three. Thus, if pitcher A starts a game and is replaced by pitcher B after one out in the fourth inning, or 10 outs, A is credited with having pitched $3\frac{1}{3}$ innings. B pitches the second and third out of the fourth inning and the first and second out of the fifth inning and is then relieved by pitcher C. Credit pitcher B with $1\frac{1}{3}$ innings pitched. The remaining opponent outs of the game divided by three is the number of the innings pitched by C.

If a pitcher is replaced with no outs, make a notation to that effect in the inning in which he was replaced. When a game is terminated after five innings of play, the starting pitcher must have pitched at least four innings to be credited with a win.

DETERMINING PERCENTAGES

To determine:

1. A pitcher's earned run average for a season, divide total number of earned runs charged against his pitching by the total number of innings he has pitched. Multiply by nine to find his average effectiveness for a complete game.
2. Percentage of games won and lost, divide games won by total games played.
3. A batting average, divide the total base hits by the total times at bat.
4. A slugging percentage, divide the total bases of all safe hits by the total times at bat.
5. A fielding average, divide the total of put-outs and assists by the total of put-outs, assists, and errors.

PART V

THE WELFARE OF THE PLAYER

CHAPTER 23

CONDITIONING AND TRAINING*

Conditioning and training are usually considered synonymous, but a distinction should be made between the two. Conditioning means preparing the body for activity and the building and maintaining of the mental and physical state which will prepare a player to give his best performance at a given time. Training includes conditioning, and it also includes improvement of old and the development of new skills for the most efficient and effective performance in competition.

A player may improve his muscles by physical movements in carrying out a skill, thus not only improving the skill, but also his condition.

A player may not be trained in a skill but may be in excellent condition. He will be a mediocre performer. On the other hand, he may be well trained in a skill, but be in poor condition. Because of his instruction in baseball technique he is able to demonstrate a skillful performance but, lacking physical stamina, he will not be able to repeat the skill or carry it on for any length of time.

To attain and maintain condition, the player, on leaving the field, must not violate the proper rules of diet, sleep, and rest. If he does so, his physical condition will deteriorate and he may be a player well-trained in the skill, but poorly conditioned. When he is not called upon for a sustained or sudden effort, his performance may be very creditable, but it will be ineffective when added effort is required. Conditioning, which is

* This material in part from Bresnahan and Tuttle, *Track and Field Athletics*.

mainly in the hands of the individual player and which may have taken weeks or even months to attain, can be destroyed in a matter of days.

Before starting on a conditioning program for baseball, a player should have a physical examination by a physician. Any organic or functional disturbance will then be discovered. He should have a knowledge of the procedures to follow to get into condition, and should be able to judge his condition throughout the season.

The following phases of conditioning will be discussed here: (1) diet, (2) elimination, (3) exercise, (4) fatigue, (5) relaxation and rest, (6) sleep, (7) staleness.

Diet

A baseball player needs no special diet, but he should follow a balanced diet for everyday living. The average American home can supply this, but the large majority of players do not live at home and are therefore required to select their own food. If they follow their own casual tastes, the selection may not be nutritionally sound.

The daily diet should consist of at least: two glasses of milk or the equivalent in by-products, such as ice cream and cheese; vegetables, one green or yellow, and potatoes; two or more servings of fruit, one raw, as an example, citrus fruit (fruit juices can be substituted); at least three eggs a week, with one daily preferred; lean meat (not fried), fish or fowl, one or more daily servings; one or more daily servings of whole grain or enriched bread, and at least two pats of butter daily.

Each individual is familiar with any reactions that he may have toward various foods and has his own likes and dislikes. He should choose acceptable foods which he relishes, and which agree with him. The following foods are acceptable and have proved agreeable to most athletes (from Bresnahan and Tuttle: *Track and Field Athletics*):

Beverages: Cocoa, coffee (if agreeable), hot water, milk, weak tea.

Breads: Dry toast, hard French graham rolls, Vienna, rye, whole wheat, and moderate quantity of butter.

Cereals: Barley food, bran, corn flakes, grits, oatmeal, rice (flakes, puffed, or boiled) wheat (flakes, puffed, or shredded).

Cheese: Soft cheese, ample helping, other cheese in small quantities.

Desserts: Custards, fruit salad, ice cream, puddings (rice, raisin, tapioca), sponge cake, candy (chocolate or sugar).

Eggs: Boiled (soft), omelet, poached, scrambled, and stirred.

Fruit: Apples (baked, raw), grapefruit, oranges, pears, pineapples, raisins, dates, and peaches.

Juices: Grape, grapefruit, lemon, orange, sauerkraut, and tomato.

Meats and Fish: Bacon (crisp at breakfast) beef (roast, stew, steak), fowl, lamb, mutton, and fresh fish.

Nut meats: Use very sparingly.

Preserves: Jams, jellies, and marmalade.

Sugar or honey: Use in desired quantities at mealtime with cereals, desserts, fruit juices.

Vegetables: Asparagus, beans (green, baked), cabbage (raw), carrots, celery, corn, hominy, lettuce, spinach, parsnips, peas, potatoes (baked, boiled, creamed, scalloped, mashed, riced), tomatoes, and squash.

There are other foods that can be added, but the above will serve as a general guide from which the player may choose his menu.

Questionable Foods

Following is a list of foods, some of which have proved annoying to certain athletes by causing gastric disturbances such as diarrhea, nausea, cramps, and gas. Other foods listed have caused excessive thirst which is satisfied only by the intake of too much fluid.

On the other hand, some individuals have no resulting ill effects even though they include certain questionable items in their diet. Whenever an athlete finds that any item of food interferes with his digestion, it should be placed on the questionable list.

Beverages: Coffee (if not agreeable,) strong tea, ice water and all iced drinks including ice cold milk. Liquids should be taken sparingly during the first hour after exercise.

Bread: Freshly baked breads, biscuits, pancakes, and waffles.

Condiments: Strong.

Meats and Fish: Chopped meats, most fried meats, pork (except crisp bacon and occasionally ham), veal, and salt fish.

Pastry: Heavy cake, pie, and other pastries which are slowly digested.

Relishes: Olives and pickles and heavy dressing.

Vegetables: Cooked cabbage, cucumbers, raw onions, radishes, turnips, and most fried vegetables.

Due to increased activity during the season of training and competition, a player's daily consumption of food normally increases. For the building and rebuilding of body tissue, protein foods such as lean meats, peas and beans (not dried) should be eaten. Since more energy is expended, this must be built up by carbohydrate-rich foods—sugar and potatoes. Proteins and fats also are energy-building foods. In addition, the diet should contain mineral salts, water, and accessory food substances such as vitamins, which are the regulators of the body processes.

During this period, a constant check on the body weight should be kept, so as to maintain the weight conducive to best condition. When a gain in weight is desired, more food, especially that of a fattening nature, can be added but not to the point of overeating. If a loss in weight is desired the amount and type of food should be restricted.

During the off season, a player will often change his activities to mild physical effort, but continue a heavy diet and gain weight. This often causes physical and mental lethargy. Digestive disturbances may also arise. The player should continue his weight check and restrict his diet so as to maintain a constant weight. Similarly, during vacation periods a player will often make no effort to maintain condition, selecting improper foods. He should keep in mind it is much easier

to maintain condition than to lose it and then again have to acquire it.

Mealtimes and Amount

Each player should consider the time of eating as well as the amount before beginning strenuous exercise. He should so time his meals that digestion will be completed before exercise begins. Experiments have shown that at least two and one-half to three hours should elapse before strenuous exercise is taken.

On competition days, when a player eats three meals a day, the breakfast can be heavy, but the luncheon should be light. Many professional players have only a sandwich and a glass of milk. Others prefer to eat a heavy combination breakfast and luncheon four or five hours before game time.

The amount of food eaten varies with different individuals and a player should be guided by his appetite, keeping in mind that if his playing weight remains constant, he should leave the table feeling that he could still eat more. The aftergame meal can be heavy, but it should be well-balanced.

In the case of night baseball, the routine of meals is somewhat different. The breakfast and lunch may be heavy, but the pre-game meal should be light. Again, if the player can eat at any time he chooses, he may have a heavy breakfast and then a heavy luncheon and dinner combined, at least four hours before game time.

The aftergame meal, if desired, should not be such that it interferes with sleep and rest. This again is an individual problem.

Elimination

The elimination of waste materials from the body is carried out through perspiration, respiration, urination, and defecation. A player following the proper rules of diet during the season will seldom have a serious problem in eliminating body wastes. The temperature is usually such that he perspires freely in playing. The activity increases the respiration, so these phases of elimination work automatically.

Urination is an automatic function. Before a game, due to excitement, a player may urinate more frequently than usual. Ordinarily, however, this should not be a matter for concern.

Defecation is the elimination of fecal matter and is the only phase with which the player need concern himself.

Exercises

Any regular pattern of exercises should be aimed toward building strength, endurance, and efficiency in the performance of skills used in playing baseball. The drills should not be hard to perform and, in the main, should deal with the large muscles of the body, since these are most important in general physical condition. The emphasis should not be upon building impressive bulges, but upon keeping the muscles loosened, relaxed, and in good tone.

The following exercises are intended for the warm-up period before regular practice. A good warm-up not only improves the muscle tone, but also decreases the possibility of injury.

The baseball player should work at increasing the strength of his hands, wrists, forearms, back, shoulders, abdomen, and legs—the heavy-duty areas in throwing, batting, and running. Stretching exercises should be used for flexibility, looseness, and relaxation of muscles.

The player should start the first few days of practice by jogging approximately a quarter-mile to get thoroughly warmed up. After about a week, the jogging can be changed to alternate walking and running of fifty yards each. As the player feels his condition improving, he should alternate walking and running, then finish a quarter-mile with alternate walking and sprinting.

At the completion of the warm-up run, the muscles are ready for exercises which will strengthen and stretch them. The player should proceed with caution; running through the drills for the first few times will frequently cause muscle stiffness and soreness.

Exercises for Flexibility, Looseness, and Relaxation.—

1. Stride stand. Extend arms sideward, shoulder high, palms turned downward. Keeping legs straight, rotate trunk as far as possible first to the left, then to the right. Repeat twenty to thirty times.

2. Wide stride stand. Extend arms sideward, palms turned downward. With legs straight, bend the trunk forward, touching the left foot with the right hand, swinging the left arm back and up as far as possible. Alternate, swinging left arm down, touching the right foot with the left hand, swinging the right arm back and up as far as possible. Repeat twenty to thirty times.

A related exercise is performed by assuming a sitting position, legs straight and spread wide, arms extended sideward. Alternate touching left toes with right hand, then right toes with left hand. Keep arms spread.

3. Wide stride stand. Stretch arms overhead, back straight. Bend trunk to the left, touching the outside of the left foot with both hands. Swing arms upward to upright position and continue, touching the outside of the right foot with both hands. Repeat twenty to thirty times.

4. Wide stride stand. Place hands on hips, legs straight. Bend trunk forward and circle body to the left in a complete circle. Repeat twenty to thirty times, then circle to the right.

5. Stride stand. Arms at sides, legs straight. Bend trunk forward left, grasping left ankle. Pull body down further. Come to upright position and repeat to right side. Repeat four or five times, stressing downward pull of the body.

6. Assume a front lying position, arms stretch overhead. Force arms and legs upward, arching the back. Rest a few seconds and repeat four or five times.

7. Lie on the back with most of the weight of the body resting on the neck and shoulders, hands braced against the sides, legs lifted. Pedal the legs. This is the familiar "bicycle."

Exercises for Increasing Strength.—

1. For the abdominal muscles: Two players lie on their backs, facing each other, feet under each other's hocks, arms

placed on hips. Rise slowly to a sitting position, then return slowly to the lying position. In the beginning, repeat six to ten times. As strength increases, twenty to thirty times.

2. For the abdominal muscles: Lie on back, hands under buttocks. Keep legs straight and raise slowly upward, hold for several seconds, and lower slowly. Repeat as in No. 1, above.

3. For arms, wrists, and back: Lie face down, hands in front of the chest just under the shoulders. With body and legs straight, push the body up to arm's length, and return. Repeat pushups ten times; eventually, twenty to thirty times.

4. For wrists and forearms: Two players face each other; one grasps a bat, hands spread. The other grasps the bat and twists it toward himself against the resistance of the first player. Continue until slight fatigue is felt in forearms and wrist. Reverse the procedure with second player holding, the first twisting.

For further strengthening of the wrists and forearms, player may carry a tennis ball or something similar—a crumpled handkerchief will do—and grip it on occasion during the day. The gripping should always be followed by stretching the hands and fingers as far as possible.

The Pepper Game

The pepper game is an excellent procedure for conditioning. One player serves as batter. From one to four players, acting as fielders, line up anywhere from twenty to thirty feet in front of the batter. A ball is tossed to the batter, who taps it back at the fielders. The fielders may toss it back and forth among themselves several times before tossing it back to the batter. Everybody involved should try a little deception occasionally, throwing or faking throws to each other high or low, to keep the players on their toes.

Other exercises may be used if desired; most coaches have their own favorites. It is worth remembering that catchers should have special emphasis on leg stretching exercises, since most of their playing time is spent in a squatting position, and the leg muscles will tend to tighten up.

Exercises During the Off Season.—

All exercises discussed here can be continued with good effect during the off season. If any major job of building-up is required, this is the logical time. In addition, various indoor games can help keep the baseball player in shape—handball, badminton, basketball. Work with the pulley weights and rowing machine also help.

Fatigue

In warming-up exercises, there is an increase in body temperature and the readiness of muscle response—to a point. Beyond that point, fatigue sets in. The player, therefore, should try to learn to warm up to the point where his muscles respond at their best when the actual game starts. Fatigue should come only in later innings, if at all. Obviously, the player who is in good condition will become tired less easily than the player who is not.

Relaxation and Rest

Good players generally have the ability to relax and rest at any time, if only for a few seconds. This ability, although it is natural with some, can be gained with practice and is a valuable aid in combating fatigue. The trick lies in learning to relax any group of muscles at will, simply permitting them to go limp. This can be practiced off the field until the player gets the knack; eventually, it should become automatic. The methods used in attaining relaxation are available in texts written on this subject.

Sleep

Different individuals require different amounts of sleep and the amount required must be decided by the individual. He should have enough sleep, so he has a feeling of well being, and the energy to carry on his work without undue fatigue.

A physically tired individual finds sleep easier than one not physically tired, since fatigue diminishes the readiness of the nervous system to respond to noise and other distractions. Retiring at a regular hour helps condition the nervous

system for sleep. The room should be darkened and well-ventilated.

Insomnia may be caused by an illness or physical discomfort, but it is usually a habit or temporary mental condition. A physical checkup by a physician will show if there is any other cause. Individuals often fret, worry and become irritated if they cannot sleep. It has been stated by some physicians that lack of sleep may make one tired, but is not injurious to the health. The really serious problem is worrying about sleeplessness, causing a nervous over-stimulation.

If there are no physical complications, a player should be reassured about sleeplessness so that he forgets his worry and anxiety about it. If he has other matters that keep him awake, a discussion with the coach will often lead to an answer to the problem. As soon as the mind and body are relaxed, the problem will be solved. At no time should drugs be used except under the direction of a physician. Before an important game a player may be nervous and excited, causing him to have trouble sleeping. If he will relax, the rest he obtains will offset the lack of sleep to some extent.

Staleness

A player may be in top condition and suddenly find himself giving a performance below his proved ability. He is in a slump. He may be continually tired and his face present a drawn appearance. He may be listless and lack enthusiasm; depending on the cause of this condition, it may last for several days or for a longer period of time.

Generally the factors causing staleness are worry, excessive fatigue, changes in attitude, or illness, any of which may cause a loss of appetite and usually a loss of weight.

Worry

Here, as in sleeplessness, a discussion between the coach and player can often solve the problem. It may be worry over studies, finances, romance, or difficulties at home. Such problems may not be easily solved, but simply talking it over with a sympathetic listener is generally a big help.

Excessive Fatigue

Overwork or monotony of the routine may cause excessive fatigue, a lack of enthusiasm and zest for practice and play. Overwork may be caused by the individual having to do physical work outside of baseball, or by heavy mental work in the case of a school or college player. A reduction of the overall work will often eliminate the cause. In many cases, a few days of complete rest from physical activities solves the problem.

Attitude

The coach is usually able to tell if there is a change in attitude toward practice and the game. The player is listless and shows discouragement and disgust. A conference with the player giving him encouragement, by explaining his good points, is often all that is needed.

Illness

When a player cannot explain the cause for his poor performance, the onset of illness should be looked for. The teeth and tonsils should be examined for possible sources of infection. A thorough physical examination should bring any illness to light.

Loss of Appetite

A player without worry, fatigue, change of attitude, or idleness looks forward to his meals and consumes them with relish and zest. When any of the above conditions exist, he will not eat the proper amount of energy-producing food. A removal of the cause will soon bring back normal appetite.

Loss of Weight

After a player has reached good condition, and he continues to lose weight, it is a definite indication of staleness. His appetite is usually poor and he is plagued by sleeplessness, anxiety, and worry. Often a reduction in the amount of physical work is all that is needed. If this does not bring the desired result, several days of rest from all physical activities will usually remedy the condition.

CHAPTER 24

ACHES, PAINS, AND COMMON INJURIES*

Whoever is in charge of the physical welfare of a team must be responsible to see that any and all injuries are recognized when they occur and that they are properly treated. This responsibility may be in the hands of the team physician as is the case in large schools, or on other teams in the hands of the coach or trainer.

It should be fully understood, however, if there is no team physician, a physician should be consulted for any definite injury or infection, since he is the only one who can safely and legitimately assume the responsibility for a player's health.

The discussion following considers aids to the aches, pains, and injuries commonly encountered by players.

The Bath

Ordinarily the object of a bath is to remove perspiration and other substances which have accumulated on the body during exercise; it also may be used for therapeutic purposes. Its usefulness in therapy depends on the temperature of the water and the duration of exposure. Unless the player is familiar with the effect of different baths, a condition may result which is undesirable and unsuited to his needs.

When a bath is used for cleansing the body, tepid water should be used. Extremes in temperature and long exposure baths should be avoided—95° F. for a period of two or three

* Drawn largely from Bresnahan and Tuttle: *Track and Field Athletics*, with the assistance of Dr. W. D. Paul, internal medicine and team physician, State University of Iowa.

minutes is enough. A mild, non-irritating soap should be used. After the bath the body should be thoroughly dried, particularly the feet and in between the toes.

A therapeutic bath may be used under the proper circumstances. Immersion in a hot bath (100° to 110° F.) for a period of ten or more minutes speeds up the bodily functions, including a sharp increase in heart rate. The hot bath is relaxing, but it is also fatiguing. It is generally effective for the relief of muscle soreness. Whirlpool baths at temperatures of 110° F. to 120° F. are effective for sprains and other injuries; only the injured member of the body is immersed.

There is a decrease in heart rate and a slowing of body functions when the body is immersed in cold water 60° F. to 65° F. for a period of ten minutes or more. Generally, the cold bath is regarded as both invigorating and restful.

Massage

Effective massage can only be done by one who is trained at it. If properly done it is an aid to the repair of injured tissue.

In cases of muscle soreness and stiffness, massage usually helps; in the case of hemorrhage, it may prove detrimental. Where immobilization is indicated, massage is not recommended.

Therefore, the type of injury is a determining factor as to whether or not massage may be used. It is the business of the physician or skilled technician to recommend its use.

The Use of Liniment

In cases of muscle soreness or stiffness, an application of liniment or oil will often help. Most liniments or rubbing oils contain ingredients that have an irritating quality, creating a feeling of warmth when applied to the skin. On cold days an application of a liniment with an oil base will help maintain it. This should be applied to the throwing arm and shoulder.

The irritating quality of the liniment can be controlled by varying the amount of the irritant. This, in most cases, can

be done by adding rubbing alcohol or witch hazel. A recommended liniment consists of 45 per cent arnica, 45 per cent witch hazel, and 10 per cent methylsalicylate. If too irritating for some players, the amount of methylsalicylate can be reduced.

Liniments should not be used daily, but only for a specific purpose.

Care of the Feet

Even though properly fitting shoes are worn, players are often subject to blisters and skin irritations in their early season training. This is due to the jarring that occurs in running and in starting and stopping; the additional strain put on the feet also creates friction.

As the season progresses, the skin on the soles and at the points of irritation thickens and toughens. This process can be aided in the early season by bathing the feet in a saturated salt solution, or by swabbing with compound tincture of benzoin.

Athlete's Foot

Many players are plagued with athlete's foot. The diagnosis and treatment is the responsibility of the physician. If, however, those who have charge of the players are informed as to its nature, and how to combat it, they can help a good deal in controlling the infection.

Prevention Aids

Here are four aids in the prevention of athlete's foot:

1. Cleanliness of the athletic plant
2. Cleanliness of clothing
3. Personal hygiene
4. Examination

1. Cleanliness of the Athletic Plant

Ordinary "mopping up" of shower rooms, locker rooms, and dusting of permanent fixtures is not enough. Frequent scrubbing of floors and fixtures, in addition to the use of effective

disinfectants, is a decided aid. The disinfectant should be one which does not irritate the skin and is still effective in accomplishing its purpose. After thorough and frequent scrubbing, a 10 per cent solution of sodium hypochlorite may be used on the floors. If this solution is used, it should remain on the floors for a period of twenty-four hours.

The frequency of treatment depends on the prevalence of the infection. A five per cent solution of zinc chloride is especially effective in cracks and crevices, where there is no possibility of the solution coming in contact with the skin, but it should not be used continually.

Lockers may be washed with the ten per cent solution of sodium hypochlorite. The same holds true of wash bowls, leaving the solution in the bowls for a period of twenty-four hours.

Foot baths with a five per cent or ten per cent solution of sodium hypochlorite may be placed at the entrance of shower baths, toilets, and locker rooms. Each person should stand in this foot bath for a few seconds whenever contact has been made with the bare feet. Frequent changes of the solution should be made to maintain its concentration. Carrying of the disinfectant on the feet will help combat athlete's foot.

2. Cleanliness of Clothing

Clothing and towels should be frequently washed and boiled. However, in order to avoid shrinkage, uniforms and sliding pads should not be boiled.

Each player should use only his own shoes and it is recommended that a dusting powder be used to help avoid infection. Some recommend a powder made up of 20 percent sodium hypochlorite, and 20 per cent boric acid. Street shoes should be well ventilated and changed frequently.

Bath shoes made of sponge rubber and worn in showers and dressing rooms are an aid. The shoes should be disinfected from time to time.

3. Personal Hygiene

The feet should be clean and dry. Each player should use his own towel, which should be clean at all times. The spread

of athlete's foot or other fungus infections is generally from the feet to other parts of the body. The bath, therefore, should be from head to foot, and the drying process should be the same.

4. *Examination*

Any foot infection or eruption should be referred to a physician for diagnosis and treatment. If the infection is disregarded and is not properly treated, it may become very resistant to treatment.

Gym Itch

Gym itch usually infects the lower portion of the abdomen, the groin, and buttocks, and axilla. It may occur on the thighs and adjacent skin. It is usually associated with those parts of the body which are in contact with one another, although it has been known to infect the toes, fingers, elbows, knees, and flat surfaces of the body.

One of the chief means of its spread is by the supporter, although it may be picked up from benches or furniture; consequently, each player should wear only his own supporter. It should be kept clean at all times by boiling; daily changes should be made if possible.

The infection begins as a flat reddish pimple. In a few days a ringlike patch with a pink or reddish center is formed. The margin of the sore is sharply defined, scaly in appearance and actively inflamed. A slight burning and itching is especially associated with the infection. The same precautions as are taken for athlete's foot should be used. Medical advice is recommended.

Sore Muscles

Muscle soreness is one of the problems which confronts every player, particularly during the early season. This may be soreness accompanying exercise or postexercise soreness.

Soreness accompanying exercise makes its appearance during the activity and will continue for a few hours afterwards. This type is associated with fatigue, and is probably an accumulation of waste products.

Postexercise soreness makes its appearance of discomfort and pain after exercise. Generally it is believed that this soreness is due to injury of unconditioned muscle fibers, and that the muscle fibers used less frequently are more subject to strain than those which are conditioned. Both types of soreness will be experienced by all players at some time or other, but by proper conditioning these can be eliminated.

The most desirable way to condition a group of muscles is to practice systematically. The important point is gradually to approach maximum effort. Conditioning, as used here, means that muscle fibers become more efficient and stronger with use. Tendinous muscle attachments and connective tissue become more resistant to strain. The absorption and elimination powers of the fibers increase.

When the elimination of waste products is adequate in the activity of well-conditioned muscles, soreness will not occur. The same holds true in regard to postexercise soreness, since the connective tissues and tendinous attachments have been strengthened to withstand the strain put on them.

Treating Sore Muscles.—

Complete rest is not usually recommended in either type of soreness. The player should continue a limited amount of exercise, along the same line as that which caused the soreness. However, in postexercise soreness, greater care must be taken since it may be necessary to prevent or break up muscle fiber adhesions resulting from the repair of injured fibers. It is believed by some that this is particularly true in some cases of sore arms caused by throwing too hard before the arm is properly conditioned, or by putting an extra strain on the arm when not properly warmed up. The application of heat is a help in the repair process. Rest should be recommended only if the arm or any other muscles do not respond with light exercise and heat applications.

Pulled Muscles.—

Should a pulled muscle occur in the arm or shoulder, rest and heat are recommended. Pulled muscles may occur

in the thigh of a player when he is not properly warmed up. Support can be given to mild cases by two circular bands of adhesive tape placed above and below the injury. As a rule, one band is placed about one inch above the injury and the other placed below the injury as far as possible, so that it will not interfere with the leg action. A severe pulled muscle requires rest and heat.

Blisters

Blisters occur when any skin surface is subject to friction and heat beyond that to which it is accustomed; they occur most commonly on the hands and feet. Grasping the bat and hitting causes friction, and during the early season blisters often occur on the hands. Ill-fitting shoes are probably the most common cause of blisters on the feet.

Blisters may be simple or infected. The simple blister is one in which the skin separation is filled with a clear watery fluid. The pain is not marked. The infected blister is marked by the presence of pain, and tenderness in an inflamed skin area. If the skin is broken, and the fluid is lost, there is danger of infection.

Blisters can be prevented by the gradual use of the part likely to be involved. The skin becomes toughened and thickened. This will protect against friction. The areas involved may also be swabbed with tincture of benzoin in early season training. Bathing the areas with a saturated saline solution is another aid.

Irritations

Irritations usually occur where two skin surfaces contact each other, or the skin comes in contact with a foreign surface. Irritations due to skin contacts can be avoided largely by washing the surfaces with a mild soap and then drying carefully. An application of dusting powder or talc helps.

Some irritations are caused by poorly fitting equipment, and the remedy is a better fit. The supporter is probably the worst offender.

Where constant irritation cannot be avoided, a gauze covering may be necessary. Constant dryness and cleansing are all important. Dryness may be maintained by the use of absorbent cotton pads which should be frequently changed.

Although dusting powder is almost always effective, mild ointments or cold cream may be preferred. Clean white socks are an aid in combating irritations of the feet.

INJURIES

Any serious injuries that may arise should be treated by the physician.

Fractures

Fractures of the bones of the fingers and hands are most frequent in baseball. In case there is any possibility of fracture, the player should have an x-ray picture taken and should be under the care of a physician. The usual procedure is to immobilize the injured member until solid union is made. The time will vary from two to three weeks in the case of a chip fracture, to ten or twelve weeks in the case of a compound fracture.

Dislocations and Sprains

Dislocation or sprain of a finger is one of the most common injuries in baseball. If the dislocation is slight, strapping of the injured member to an adjacent finger, or fingers, will be an aid. If the dislocation is severe, traction may be necessary. This, again, should be in the hands of the physician.

In the case of an ankle sprain, application of ice water immediately after the injury occurs, or the application of ethyl chloride prevents hemorrhage and swelling. A pressure bandage is applied after the cold application. A physician should see the injury and have an x-ray picture taken to be sure there is no fracture.

After a period of twenty-four hours, the application of heat is a valuable aid. Whirlpool baths and heat treatments are recommended. Taping will give added protection, the basket

weave strapping generally being used. Only a physician should do a procain injection.

Contusions

A contusion may be a superficial or severe bruise, and often occurs on the catching hand of a player. Other cases occur when the player is hit by a batted or thrown ball. Because of hemorrhage, due to ruptured capillaries, swelling appears in a matter of minutes. The hemorrhage increases if activity is continued. The application of ice water or ethyl chloride as soon as possible will stop the hemorrhage. A pressure bandage applied after the cold treatment will reduce the possibility of swelling.

In cases of contusions on the hand, a sponge rubber pad cut as a doughnut and placed around the injured area, so that pressure is not directly on the area, will often permit the player to continue his activity.

Bone Contusions

In cases of bone contusions on the palm of the hand, rest is often necessary to clear up the injury. The treatment should be cold applications immediately after injury. After a period of a day, heat applications are of value. Massage should not be attempted for a period of at least twenty-four hours or more on any contusion. This depends on the severity of the injury. The massage must be done carefully on the tissues surrounding the area, and not actually on the injured area. The massage will then aid in the absorption of the hemorrhage. A sponge rubber pad should be used when activity is resumed.

Stone Bruise on the Heel

The covering of the flesh over the calcaneus, or heel bone, is thin, and running on hard ground or constant pounding causes a very painful injury. The principal treatment is immersion in hot water and the prevention of further injury by taking pressure off the sore spot.

The commonly accepted protective measure is to encase the entire heel with one-half-inch to one-inch tape, applying it as

tightly as possible. This tape is applied as a basket weave bandage, but is not brought around the foot so as to restrain circulation. The edges of the tape are covered with a strip of tape to prevent curling.

A sponge rubber pad with a depression cut in it fitting over the bruise is fitted to the foot and into the shoe. The depression allows the weight to be spread over the heel, but not on the bruise. When the injury first occurs, the sponge rubber pad should be taped snugly to the heel. After a week or two the pad can merely be inserted and fastened into the shoe.

Heel Callus and Spur

Due to constant pressure and friction on the heel by the baseball shoe, a heel callus is sometimes formed. If it continues to grow, it becomes quite painful. The generally accepted treatment for a heel callus is to cut a piece of felt in the shape of a doughnut, taping this over the callus. The pad should be taped on snugly, thus reducing friction and pressure. The trouble will usually disappear.

A growth on the heel, called a spur, is sometimes developed due to an injury to the calcaneus, or heel bone. This is a very painful condition and should be immediately referred to a physician. Operative procedure is the only remedy.

Shin Splint

Shin splint is usually caused by continuous running on hard surfaces, and usually occurs in early season training because of overwork. Treatment consists of heat massage and the application of counter irritant ointment packs left on overnight. There is little circulation in this area and "hot" ointment packs will help increase circulation.

Lacerations and Puncture Wounds

Lacerations and puncture wounds generally result from being accidentally cut by the spikes of baseball shoes. Both should be immediately referred to a physician. In a laceration, the skin around the wound is thoroughly cleansed with surgical soap. The wound is antiseptically treated and imme-

diately sutured. A pressure bandage is applied over a surgical dressing for a period of approximately twenty-four hours to prevent the collection of blood and serum in the tissues surrounding the wound. A dry sterile dressing is then applied. The wound usually heals in a period of five to seven days, at which time the sutures are removed.

In the case of puncture wounds, the wound is thoroughly cleansed and antiseptically treated. A sterile dressing is applied, and an anti-tetanus treatment is given.

Sliding Burns and Skin Tears

All sliding burns should be cleansed antiseptically with warm water and a mild soap. Any foreign material must be carefully removed. Merthiolate can be applied, and the burn then covered with a sterile dressing, or a 5 per cent sulfathiazole cream may be applied. When sulfathiazole cream is used a sterile dusting powder is applied and the burn covered with a sterile dressing. Usually a mild superficial sepsis develops. The burn should be protected by a sponge rubber doughnut to prevent further injury during activity.

In cases where the skin may be torn on the hands or fingers by being struck by a ball, or for any other reason, it should be cleansed antiseptically. The physician should check the injury and will give an anti-tetanus treatment if he deems it advisable. The tear should be repaired and protected by a sterile dressing until healed.

PART VI

THE UMPIRE

CHAPTER 25

UMPIRING

Relatively little has been written about the principles of umpiring, despite the fact that officiating a baseball game is a complex and demanding skill. The discussion that follows is only a brief outline; it is included because a knowledge of the fundamentals is useful, not only to the inexperienced or part-time umpire, but also to any one connected with the game, including the spectator. This is the way the rule book sums up the umpire's duties:*

He has the authority to administer all rules, enforce prescribed penalties and order anyone on the playing field or within its confines to refrain from committing any act not in accordance with the rules. An umpire must, therefore, be cognizant of all the rules of baseball. When there is only one umpire his duties consist of administering all the rules and he has jurisdiction over all matters pertaining to the game. He takes a position on the field that in his opinion will enable him best to carry out his duties. This position is usually behind the catcher, except when there are runners on base. He may then place himself behind the pitcher to carry out his duties.

When two or more umpires are officiating, any decision made by an umpire shall be final, and no other umpire shall

* In part quoted, in part paraphrased from the Official Rules, 1951 edition, by special permission of A. B. Chandler, Commissioner of Baseball.

criticize, interfere or seek to reverse another umpire's decision, except when the umpire making the decision calls another into consultation.

An umpire's judgment on a decision may not be appealed or his authority on matters pertaining to the game questioned. If, however, a decision is in conflict with the rules, the coach, manager or captain may seek its reversal by requesting the umpire to make the correct ruling.

If there is an associate umpire, he may be consulted by the umpire who made the decision, and after consultation, if he be convinced that the decision was in conflict with the rules, he shall reverse such decision.

When there are two, three, or four umpires, one shall be designated as Umpire-In-Chief; the others as Field Umpires.

The Umpire-In-Chief has complete charge of the game and is responsible for its proper conduct. Preliminary to the game he should inspect all implements of play and players' equipment; check the proper marking and condition of the field; five minutes before game time he meets with the captains, coaches and/or managers at home plate where official batting orders are exchanged and announced as are any special ground rules. If the representatives of the two teams cannot agree on these special rules, the umpire shall formulate the rules and these shall be legal.

To start a game the umpire shall call "Play," and to suspend play he shall call "Time," the ball becoming dead. The ball is alive and play again starts when the umpire so calls.

If it becomes necessary, the umpire may disqualify any member of a team, including the trainer or bat boy, sending him from the field. He shall call and count all balls and strikes; call and declare fair and foul hit balls, except those ordinarily called by the field umpire. He shall decide when a game is forfeited or called; make final decisions on any points not covered by the rules, and penalize for any infractions covered by the rules, such as interference, balks, unwarranted disputing of a decision, or unsportsmanlike conduct.

The field umpire takes a position on the field which in his opinion is best suited to render any decision that may arise on the bases, except those reserved to the Umpire-In-Chief. He aids the Umpire-In-Chief in enforcing the rules. He has joint and equal authority with the Umpire-In-Chief in calling "Time," balks, use of an illegal pitch, defacement or discoloration of the ball by the pitcher, calling a caught fly ball, and removing from the game any players as may violate the rules.

This is the pattern for umpiring in the present day. At the turn of the century, however, the arbiters had tougher going. They were abused by the players, spectators, and writers, and often insulted on the streets. On occasions, when an umpire made a decision in a close game against the home team, he would have to be escorted from the park to avoid the wrath of the spectators. On other occasions he would not be permitted to enter the park; there were actual cases when the umpires had to sneak into major league parks. Under these circumstances the umpire had a lonely life and unless he had friends of long-standing in the cities in which he officiated, he would often go to his hotel room and not reappear until he again departed for the field. The turnover in the profession was large and those who survived were men of courage, determination, and intelligence who called the plays as they saw them. Those who did not have these qualifications were quickly eliminated.

In 1901, Ban Johnson, president of the American League, gave his umpires absolute authority and would not tolerate intimidation by club owners, a custom prevalent at the time. Young and alert men of good size were chosen. Uniforms were standardized and a field umpire was added. The National League soon followed these reforms.

Signals were developed for calling plays. For example it was customary to call balls and strikes by voice only in the early days. In 1906, because his voice went bad, Bill Klem, famous former National League umpire, is said to have originated the system of indicating called strikes by raising his right hand above his head; the hand remained at his side if the pitch was a ball. Umpires at the present time use both

voice and action signals and although these are not standardized, a general pattern is followed.

When two or more umpires are working together, there should be a definite understanding what each will do in different situations.

Calling Plays

If there is more than one umpire, the Umpire-In-Chief takes a position behind the catcher, as close as he can without interfering with him, to call balls and strikes. If there is only one umpire—a rarity these days—he takes the same position unless there is a base runner. Either of two stances may be used.

1. Just before the pitch is delivered, the umpire assumes a crouch so he looks over the left shoulder of the catcher if a right-handed batter is at the plate (Fig. 155), and over the right shoulder if a left-handed batter is at the plate. This is the method used by National League umpires.

2. American League umpires stand more upright as they call balls and strikes. In both positions, at the instant the pitched ball passes the plate, the pitch is called and indicated. Although signals are not completely standardized and there are variations, the following are frequently used.

For a ball, the right arm stays at the side (Fig. 156). When strike one is called, the right arm is brought up, the elbow bent and the strike indicated by one finger (Fig. 157). Strike two is called by bringing the right arm up in the same manner, followed by another slight down-up movement of the arm and the second strike indicated by two fingers (Fig. 158).

When strike three is called, and the pitch is caught, the right arm is thrust forward, leaving no doubt in the batter's mind that he is out (Fig. 159).

When ball four is called the umpire points or waves his left arm toward first base (Fig. 160). This eliminates any chance of misinterpreting the signal.

When a foul fly is hit in back of the catcher, the umpire must be alert not to interfere with him as he wheels and goes back for the ball.

Fig. 155.—Position preparatory to calling pitch.

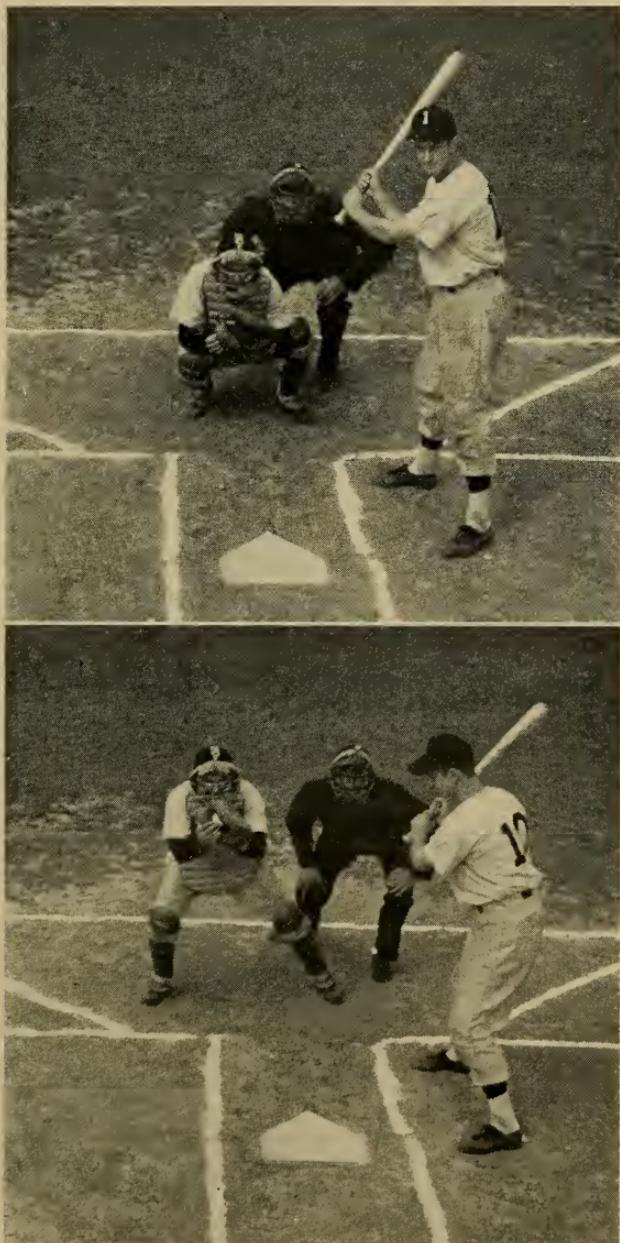


Fig. 156.—Ball.

Fig. 157.—Strike one.



Fig. 158.—Strike two.

Fig. 159.—Strike three and out.



Fig. 160.—Ball four.

Fig. 161.—Fair ball along third base line.

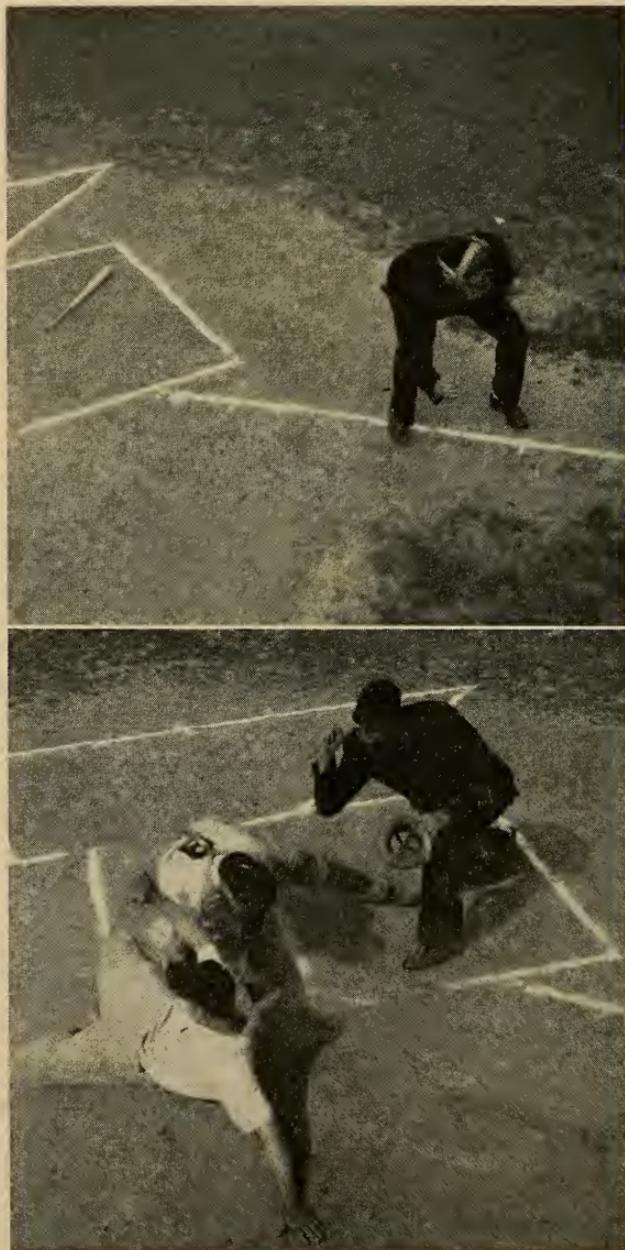


Fig. 162.—Runner out at plate.

Fig. 163.—Runner safe at plate.

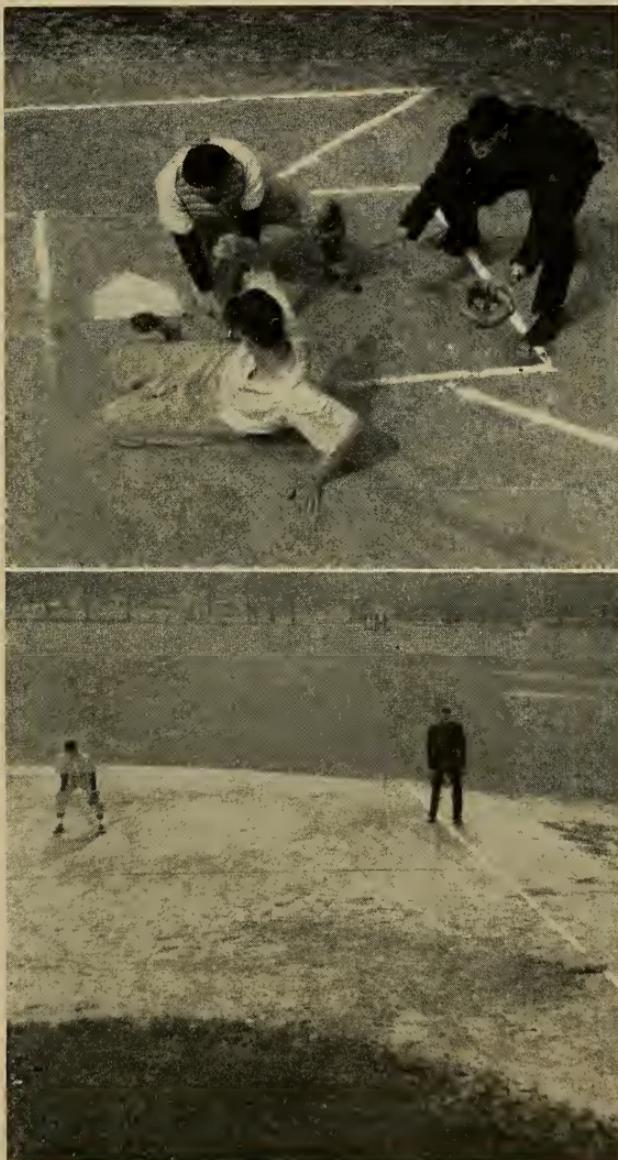


Fig. 164.—Position of field umpire with no one on base.

When a batted ball is hit close to either foul line, the Umpire-In-Chief should immediately step forward, straddle the line and indicate if the ball is fair or foul by pushing his hand to fair territory if fair, and to foul territory if foul. If it is a fast play he may not have time to remove his mask as he rushes to the line (Fig. 161).

When for any reason the umpire wants time called, he says "Time" and simultaneously raises both hands above his head.

On plays at home plate a force-out or tag is designated by the same action as a called third strike, or by using a short uppercut movement of the right arm (Fig. 162). He calls "You're out" or "Strike three" at the same time.

Another action frequently used is to bring the right arm up with the thumb up. This action is responsible for the expression "getting the thumb," since not only is it used to call an out but also when a player is put out of a game.

When the runner is safe on a close play the umpire assumes a crouch, both arms extended forward and to the side, palms turned down (Fig. 163). The field umpire designates his calls for time, force-out, tag and safe in the same manner.

Position of The Field Umpire

When no one is on base and one field umpire is working, he usually takes a position astraddle the first base foul line, or just in foul territory beyond the infield so he will not interfere in any way with a fielder (Fig. 164).

When the ball is hit to the shortstop or third baseman and the play is at first for the out, the field umpire swings into fair territory about ten or fifteen feet. He gets in such a position that he will not interfere with the throw. As the fielder throws the ball, the umpire faces the runner and first base. The umpire watches the foot of the runner as it touches the base, and listens for the thud of the ball in the glove of the first baseman. As the play is made he calls and signals for the safe or out (Fig. 165). The same technique is used for a force-out at any other base.

On any tag, the umpire should get in the best position to call the play, and then keep his eye on the ball.

When first base is occupied and the defense is in double play or normal position, the field umpire usually takes a position on the infield behind the pitcher and toward the first base side of second base in a spot where he will not obstruct the view of the second baseman as the pitcher delivers the ball to the batter. Fig. 166 shows good position for the field umpire calling a play at second.

Fig. 165A.—Safe call at first and umpire position.



Fig. 165B.—Out call at first.

When second or third base is occupied, his usual position is on the infield toward the third base side of second base, but not obstructing the view of the shortstop. If a ground ball is hit and the play goes to first base, he runs toward this base and calls the play.

When the infield is in close, the umpire should take a position behind the shortstop or second baseman, since the probable play is on a runner going home. The umpire will then be clear of any interference possibilities.

When two field umpires are working and no one is on base, one takes a position along the third base line similar to that of the umpire along the first base line.



Fig. 166.—Safe call at second.

When bases are occupied, the field umpires take positions where they feel they will be best able to call any possible play that may arise. This, of course, depends on game situations, such as the number of outs and the defensive alignment.

Working Together

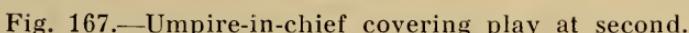
An umpire ordinarily should never reverse himself on a play where only judgment is involved, but there are occasions when an umpire calls a play on which there are protests which raise a question in his own mind on the call. In such a situation any team of umpires should have a signal to indicate to one another whether they are or are not in agreement on the call. The usual custom is for the umpire who made the call to look

at his associate. The associate keeps his arms at his side if he is not in agreement, and if he is in agreement he gives a signal. Either of two signals is commonly used. The right hand is placed across the chest, or both arms are brought up, fists closed, shoulder high. When officials do not agree, they should confer and always out of the hearing of the players.

A.—Safe.



B.—Out.



When there is no one on base and a drive is hit to right field that may be trapped, and only one field umpire is working, he should run out toward the play so as to be in good position to see it. The plate umpire should run directly toward second base to be in position to call a possible play there (Fig. 167).

If there are two field umpires, the third base umpire will, of course, cover the possible play at second. On any other possible traps, field umpires should cover the plays if they can.

On other balls hit to the outfield where the fielding will not be questionable, the field umpire should run into the infield, out of the probable path of the runner, keeping his eyes on the ball; then run toward second base, always keeping the ball in sight. He is then facing the possible play and will also be out of the way, eliminating a possibility of interference with the throw. When the ball is hit with first base occupied and there is likelihood of a play at third base, the plate umpire should cover third; the field umpire will have to cover second or first for a possible play there.

There are other situations that will arise, but with a thorough knowledge of these principles, a good knowledge of the game and an understanding with his associate or associates on what each will do and how it is to be done, the umpire can fulfill his duties efficiently and with authority.

POINTS TO REMEMBER

An umpire should never anticipate a decision nor call a play too soon, but should know all possible plays that may arise. Thinking ahead and knowing players' abilities, such as throwing, speed afoot, and hitting, are aids in anticipating plays. No arm motion for "out" or "safe" should be made until a play is completed.

Watch for fumbles or dropped balls after a player has been called out. Do not turn away too soon after a force-out followed by a throw.

Knowing where a fly ball fell or a thrown ball stopped is of utmost importance. Always keep your eye on the ball as long as it is in play, the exception being a force-out when the runner is watched and the thud of the ball in the glove is listened for.

Be in position to see every play.

Do not converse with the players and coaches. Ignore the spectators, even though it may be difficult.

Do not expect praise for doing your work well. Remember it is best when not noticed. Have a devotion to the game and pride in your work; otherwise you will not be successful. Have hustle, patience, and good judgment. If a bad situation should arise, exercise self-control and keep your temper. Impartiality, courtesy, and firmness compel respect.

Calling 250 to 300 pitches in a game requires physical and mental alertness. Keep in good mental and physical shape.

Consult an associate if there is a question in your mind on a rule. It is more important to be right than stubborn.

Have a system of signals with your co-worker so that you can check with him concerning the accuracy of a difficult decision.

Always carry a rule book.

In professional baseball the Umpire-In-Chief breaks the seals of all boxes containing the baseballs that may be used in the game an hour before its start. The balls then are rubbed with a special dirt to remove the gloss from the cover. This procedure eliminates any tampering. (Freezing the ball will deaden it and putting the ball in high temperature will give it more life.) In all other types of baseball, request that the seals be broken only as the balls are used. The wrapping and cardboard box containing the ball will prevent tampering.

Keep your uniform and equipment in good condition.

Forget the game after it is over; discuss it with none other than your associate.

PART VII

OBSERVATIONS

CHAPTER 26

POSTSCRIPT

The general observations which make up this final chapter are highly personal; perhaps they do not even belong in a textbook. But the author has played, coached, and lived baseball for more than thirty-five years. He has known thousands of people connected with the sport, from top-flight major leaguers to eager eight-year-olds. And he has, inevitably, developed a lot of his own opinions.

That's what this chapter is; strictly personal, and perhaps a little wandering, but offered for what it's worth.

What's Happening to the Game?

Baseball, like most major sports, has seen many changes since its beginnings—changes in almost every element of the game. Even the uniform has been affected.

The first baseball uniform that the author can recall was a different affair than is now worn. The pants came just below the knee, and the tops of the long wool stockings were rolled snugly into them. Shirts were more snug, fastened at the top, and were complete with collar. The glove—outside of the first baseman's and catcher's mitts—was a thumb-and-four-finger affair.

Today's uniforms are loose and roomy—so much so that some players appear, at first glance, to be wearing ski pants—

with the emphasis upon freedom of action. In the 1950 season, the Hollywood team introduced shorts, and that costume may become common.

Gloves have been redesigned to make it easier to catch or trap the ball; bats have become lighter, the ball more lively. The iron-minded manager who acted like a drill sergeant and considered any concern for his player's personal welfare beneath his dignity has practically disappeared. Such devices as the slow-motion movie, the batter's tee, and "Iron Mike," the pitching machine, have led to better analysis of player weaknesses, better teaching, and better performance in the field.

The great change, however, has been in what might be called the philosophy of baseball offense—or, to put it more simply, the rise of the hitter's game. Until the time of Ruth and Gehrig and the development of the great fence-busting teams, managers played for one run at a time. The emphasis was upon stealing bases, sacrificing, squeezing; "get him on and then work him around" was the slogan.

Except in a few cases, today's major league managers generally play, not for one run, but for the cluster of runs, the big inning. These teams will frequently score more runs in a single inning than the opposition scores in the entire game. Today, the lead-off man who gets on base may be bunted down to second occasionally in the late innings, but he is more likely to hang around the base and wait for one of the men behind him to park it in the grandstand—a grandstand which probably has been moved in to make it easier to do just that. Base stealing as a whole is not the art that it was.

The transition has paid off, financially. Baseball attendance has shown a general increase from the time the major leagues were first organized, and the total budget for some such organization as the Brooklyn Dodgers, if the farm clubs are included, would be an unbelievable figure to an owner of the World War I era. Baseball has become big business in anybody's book, and the home run is the cornerstone.

This does not mean that the author feels that the good old game has sold its soul for gold, or that today's professional

league baseball is inferior to the old brand. It is simply a different kind of baseball, with a different emphasis, and it has the most important asset—the public likes it.

It is important to note, also, that this swing to slugging baseball has happened primarily in the higher professional leagues. The great hitter is a very rare animal, and professional baseball is constantly on the lookout for him. By the time such a player is nineteen or twenty, he is almost invariably playing professional ball. In a day when the \$100,000 bonus is not unheard of, it's a rare youngster indeed who will prefer to go to college or stay in a small town to work in the grain elevator by day and play semi-pro baseball at night.

This means that the slugging game is pretty well confined to the higher professional leagues; a college or high school or community coach who tried it would be in pretty sad shape. Many teams outside of these leagues still steal, and hit-and-run, and squeeze, and double-squeeze; they still play the traditional complex and fascinating offense, based upon split-second timing and good headwork. There is much satisfaction in that kind of ball for coach, and player, and spectator. And there will be a place for it as long as the game itself exists.

Night Baseball

Night baseball, like the hitter's game, has a strong connection with economics. Night ball in the major leagues was begun by Cincinnati in 1935; at the time of this writing, every big-league park except one is lighted. Almost every baseball-conscious town, even the smallest, has facilities for night play; so do many high schools and colleges. The reason is simple—more people can attend at night, and better pay the freight.

There can be no argument with that kind of reason; anything which permits more baseball to be played and permits more people to see it is good for the game. At the same time, there is little question that playing under lights alone does have some effect upon the player's skill and efficiency.

"Because of the shadows and funny concentrations of light," a well-known second baseman told the author recently, "I have a lot of trouble getting the jump on the ball at night. I

seem to lose it just as it hits the bat, and it's coming back to me before I pick it up again. I lose a step, at least, and some grounders get past me for hits that would be infield outs in the daytime."

Constant research in engineering and experimentation has steadily improved the lighting in major league parks, but many smaller layouts are badly lighted. This increases everybody's problems in regard to actual play.

Many players contend, for example, that whatever advantage is given the hitter by the fielder's inability to see well is more than cancelled out by the pitcher's advantage under artificial light. A major-league scout summed it up this way, speaking of a highly-touted semi-pro player:

"I only saw him at night. He throws hard, and the umpire—who has trouble seeing at night, too—seemed to be giving him everything from the chin to the top of the ankle. He struck out fourteen, but I don't know whether he's any good or not. I do know it's bad for him to get the notion that he's *that* good."

Many players feel that the pitcher with either a good fastball or sharp-breaking curve has a particular advantage at night. With additional difficulty in seeing, the batter must be very loose in the box to avoid being hit.

Pitchers, on the other hand, have their own complaints. In most sections of the country, the temperature drops relatively rapidly at night, even in mid-summer. Many players, and particularly pitchers, feel that they cool off too rapidly and thoroughly between innings because of the lower temperatures, and hence have more sore-arm trouble.

It also has been pointed out that the player's daily routine becomes more difficult to establish when he's playing night baseball. Regular hours are essential to good physical condition; night baseball means that the player gets to bed at one or two in the morning, and often he saves his biggest meal of the day until bedtime. The major-leaguer, in particular, has the problems of playing both night and daytime games, which means his daily schedule is constantly shifting. The player

who works only at night can, in time, make some kind of adjustment, but it seldom is completely satisfactory.

If financial considerations permit a choice, it is this writer's feeling that the coach should schedule his ball games for daytime. Some of the problems connected with night ball are being ironed out, and there will be further progress, particularly in the field of lighting. But there is little question that the young player will better develop his skills and get accustomed to baseball at its best if he plays most of his baseball under the sun.

Superstitions

Baseball, as much as any other sport, has its superstitions. Almost every player who plays the game for very long develops one, or even a set, of his own. Some are traditional, and have come down from the game's early days. For example:

Seeing a load of barrels brings good luck at bat.

Seeing a white horse means a hit. (There is a story in baseball folklore about a manager who carefully arranged for white horses outside the park on occasion.)

Both of these are becoming rarer, of course, with the disappearance of the old-fashioned brewery wagon and the horse. But the following are strong as ever:

The cap should be the first part of the uniform a player puts on when dressing for a game; otherwise, bad luck.

It is bad luck not to contribute to a beggar on the street.

It is bad luck to step on a foul line going from or coming to the dugout.

It is bad luck to put away the bats before the final out.

It is not only bad luck but a sure hex to mention the fact that a pitcher has a no-hitter going.

Stepping on first or third base on the way to the outfield means good luck.

Leaving the glove so that the fingers point to the outfield at the end of the defensive half of the inning is good luck.

There are literally hundreds of other such superstitions. Nobody in his right mind ever seriously contended that following such quaint notions ever won a ball game; the third base bag certainly contains no mysterious magnetism that draws the ball to the bat.

But such customs, even when followed jokingly, can make a difference in a player's confidence—and confidence is everything in baseball. The pitcher who believes that he will strike out a batter because he saw the man step on the foul line on his way in, very possibly has a better chance to do so. The hitter who believes he is going to clout it the next time he gets up there definitely is more likely to come through than the man who is not so certain.

Such beliefs do no harm, and they may add a lot to the player's confidence and mental set. This certainly does not mean that the coach should go around cultivating superstition among his charges—but neither does he have to argue with them about logic and scientific reasonableness. If it's harmless, legal, and helps produce a better performance, don't "monkey" with it.

The Fine Art of the Squawk

Every coach and ball player, sooner or later, encounters a situation where he feels somebody's called one wrong. Depending upon his temperament, he may encounter such situations anywhere from twice a game to once a season.

It is a simple fact that a well-timed protest, done with dignity and calm, can have an effect. No umpire worth his salt ever changes his mind on a call, unless some outside factor which he had not noticed is called to his attention. But the wise coach or captain seldom protests in the hope that an umpire might change a decision; his objective generally is to cultivate the ground for a better break the next time. This is a definite part of the game, and certainly not illegal or unsporting.

Such protests should be infrequent and moderate to be effective. The coach who comes whooping off the bench every time a close one is called against his boys is something like

the boy who cried "Wolf!"; before long he is ignored (or, in the case of professional ball, excused from the park), and any argument becomes totally useless.

In school or college baseball, the individual player should be restrained from argument with the umpire. The captain should handle any matters that require discussion; he is the official spokesman for the team. In turn, the coach should remember that he is doing more than directing his team; he is also serving as an example, which gives him a responsibility to maintain his poise.

Baseball Slang

Finally, a note on the language of the game. Baseball has many slang expressions which make up its own vocabulary and wherever and whenever baseball is played or discussed these expressions are used.

They vary somewhat in different sections of the country. A few are listed below; the reader is referred for a more complete list to the *Baseball Record Book*, published by the Sporting News, C. C. Spink & Sons, St. Louis.

<i>Equipment</i>	<i>referred to as</i>
Ball	The horsehide, onion, nugget, rock, pill, marble, apple
Base	The bag, sack, cushion, hassock, pillow, station
First base	The initial sack
Second base	The keystone sack, the middle cushion
Third base	The hot corner, far corner
Home plate	The platter, disk, pan, saucer, rubber
Bat	The timber, lumber, ash, willow, stick, shillalah; (Big Bertha when a favorite bat)
Bat rack	The lumber yard
Catcher's equipment .	The tools of ignorance
Mask	The cage
Mitt	The pad, pud

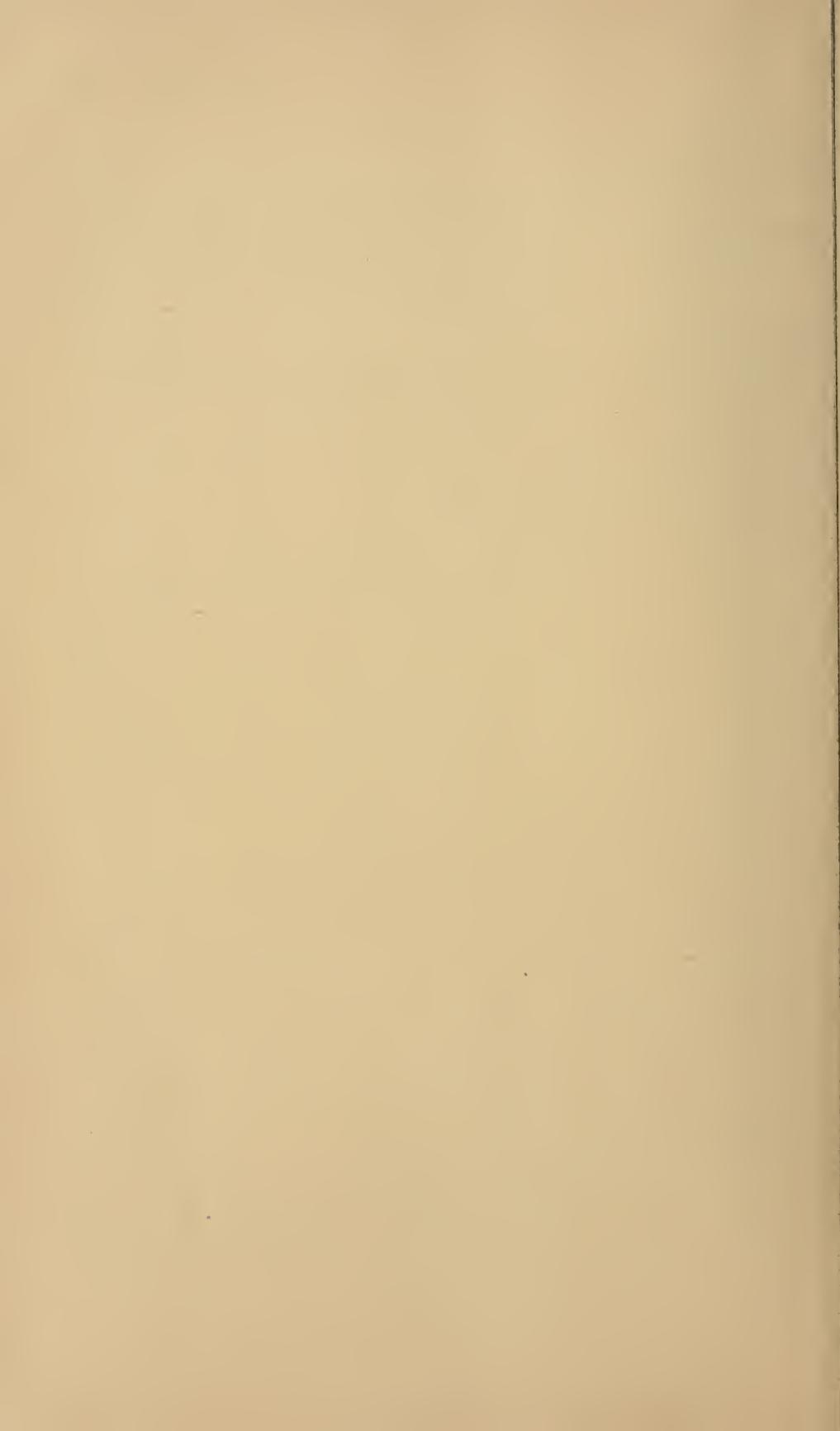
<i>Equipment</i>	<i>referred to as</i>
Uniform	The monkey suit, spangles
Glove	The eagle claw
Sliding pad	The blanket
<i>Individuals</i>	<i>referred to as</i>
Baseball enthusiast	A bug, crank, nut
Catcher	A grabber, receiver, backstop, snatcher
Coach at first base	A barker, wig-wagger
Coach at third base	A flagman, traffic cop, yodeler, wig-wagger
Groundskeeper	The manicurist
Infielder	Inner gardener
Manager	Teacher, skipper (first assistant is "shadow")
Outfielder	Outer gardener (ball hawk, if good fielder)
Pitcher	A moundsman, thrower, chucker, hurler, twirler
Who is left-handed	A crooked arm, portsider, sidewheeler, southpaw, wrong armer, cock eye
Who has little on the ball	A nothing baller, only a glove and a prayer, cunny thumber
Who works often	An iron man, rubber arm
Who relieves often	A fireman
Who by manner- ism shows when he pitches curve	A telegrapher
Umpire	A guesser, blind Tom, Jesse James, robber, man in blue
<i>Batted balls</i>	<i>referred to as</i>
Easy ball to infielder	Arlie Latham
Base hit	A bingle, blow
Ball not hit well	A bleeder, blooper, fluke
Line drive	A liner, blue dart, clothesline

<i>Batted balls</i>	<i>referred to as</i>
High fly	
easily caught	A can o' corn
Home run	A circuit drive, down towner
Pitched ball easy to	
hit	A fat one, grapefruit, balloon
Looping hit that	
drops safe	A banjo hit, humpback liner, pooper, plunker, looper

<i>Field and Its Parts</i>	<i>referred to as</i>
Rough infield	An ash heap (if bumpy, contractor's back yard), Hogan's brickyard
Place where relief	
pitchers warm up	The bull pen
Small field	A cigar box
Dugout	The coop
Very small field	A flea box
Pitching mound	The hill, slab
Park itself	The orchard
Smooth infield	A pool table

<i>Player who</i>	<i>referred to as</i>
Continually alibis for	
mistakes	Alibi Ike
Does a lot of kidding	A barber
Is taken out of the	
lineup	Benched, or got the gate
Looks good in train-	
ing and then fails	A bust, bloomer
Steps back away	
from pitch	Stepping in the bucket, bucket hitter
Is raw recruit	A busher, hay shaker
Doesn't hit ball hard	A buttercup hitter
Misses an easy field-	
ing chance	A butterfingers

<i>Player who</i>	<i>referred to as</i>
Continually airs his views in clubhouse	A clubhouse lawyer
Shows off	A grandstander, County Fair
Is awkward	A cunny thumber (or belongs to awkward squad)
Finds fault	A crab
Keeps to himself, never treats	A Dick Smith, loner, lone wolf
Is not alert.....	A dreamer
Judges pitched balls well	An eagle eye
Thinks only of pay days	A first and fifteenth player



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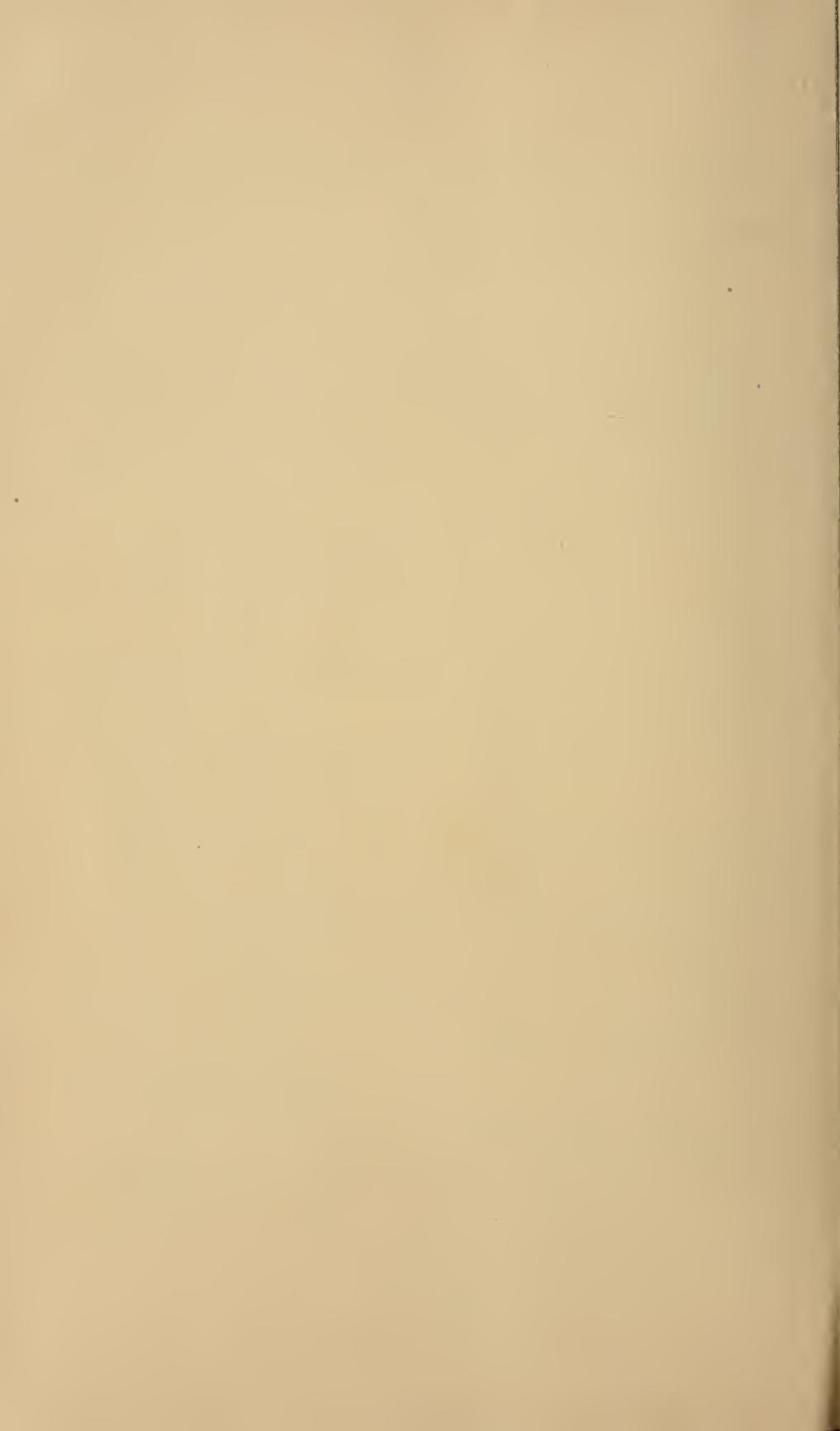
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*Figure numbers in parentheses.







A QUICK GUIDE TO DEFENSIVE STRATEGY

No one on base regardless of score: Play the batter. Coach check infield and outfield to see that they have shifted for type of batter at bat.

Key:

PB—play batter—deep if a strong hitter,
closer if weak hitter or fast runner

C —infield close for play at home

DP—infield half way for double play

Bx—infield bunt situation—2nd baseman in
position to cover first. Third baseman
and first baseman close enough to field
bunt attempt as batter drops bat. Two
strikes called, PB.

1. Score even, early part of game

	Runner on First Outs			Runner on Second Outs		
Strong hitter.....	DP or Bx	0	1	2	0	1
Weak hitter.....	Bx	DP	DP	PB	PB	PB
	Runners on First and Second			Runners on Second and Third		
Strong hitter.....	DP or Bx	DP	PB	C	C	PB
Weak hitter.....	Bx	DP	PB	C	C	PB
	Runners on all Bases					
Strong hitter.....	C or DP	DP	PB			
Weak hitter.....	C or DP	DP	PB			
	Runners on First and Third					
Strong hitter.....	DP	DP	PB			
Weak hitter.....	DP	DP	PB			

Play runner on third
if he breaks and good
play can be made. If
not, go for double.

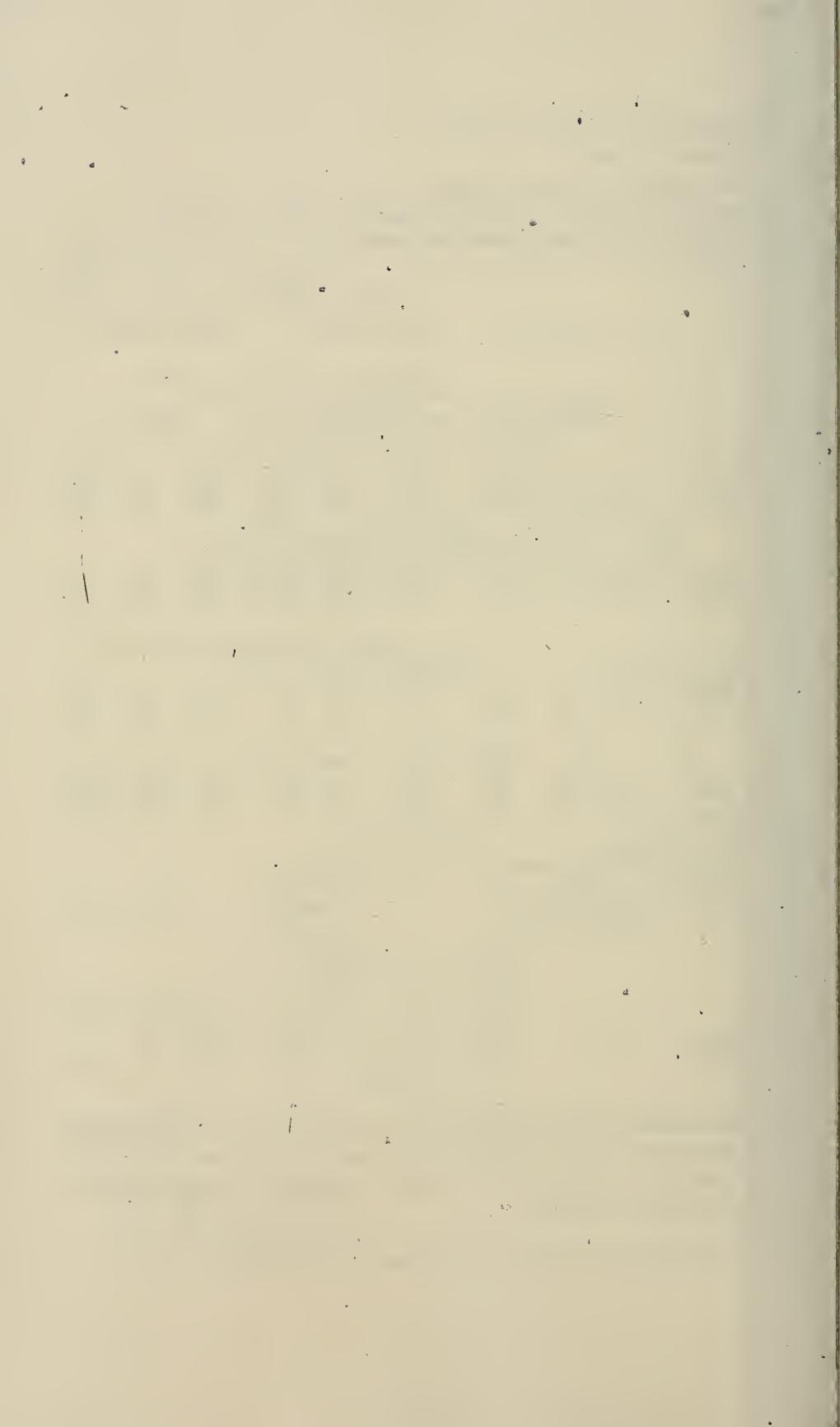
uns behind, early part of game
ay similarly to 1.

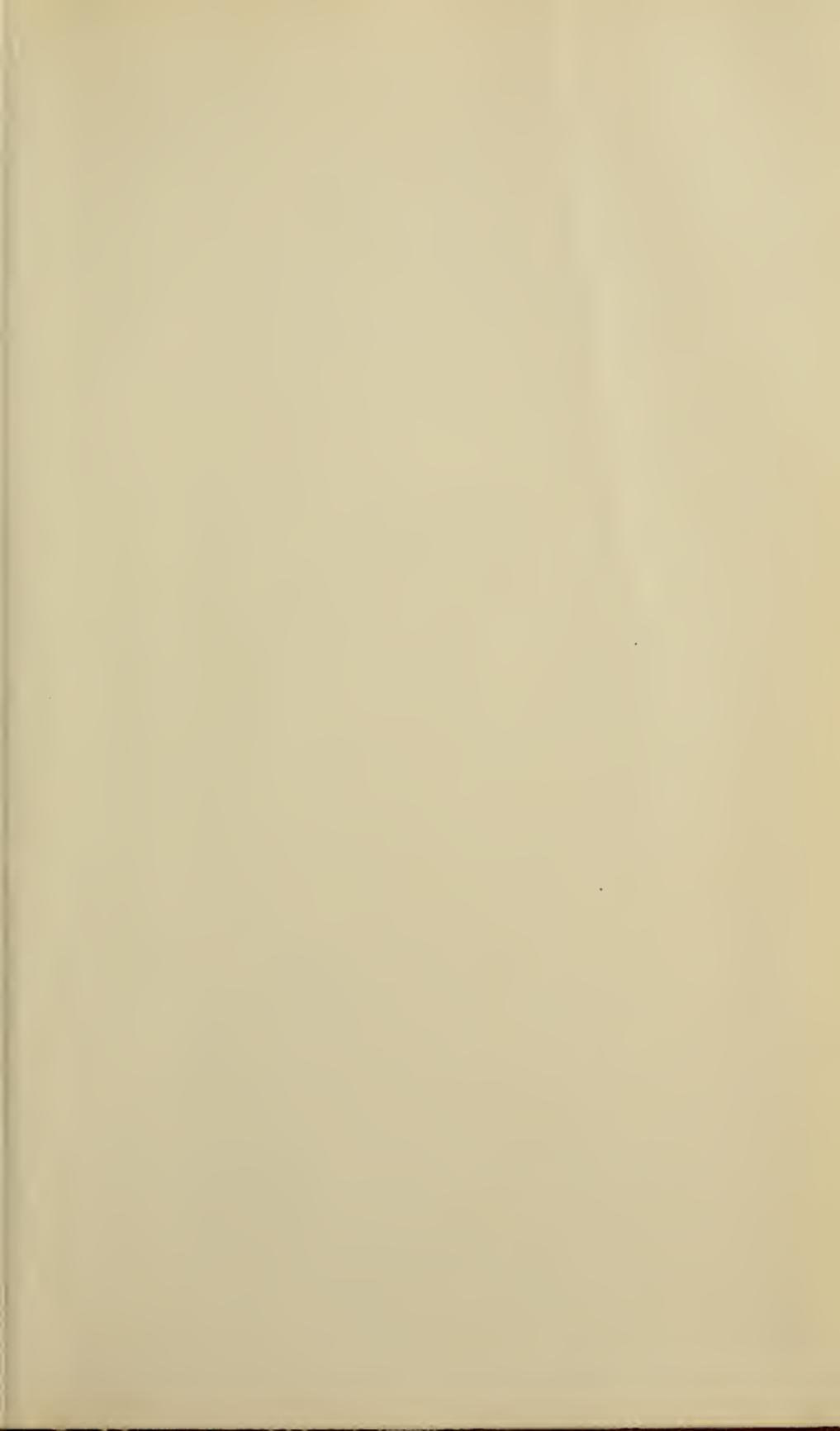
uns ahead, early part of game
more close position—play DP or batter.
crifice a run to keep batter off base.

Last of Game																
Score Even			Runs Behind				Runs Ahead									
Runner on First																
Outs																
hitter	0	1	2	0	1	2	0	1	2							
hitter	Bx	DP	PB	DP	DP	PB	DP	DP	PB							
hitter	Bx	DP	PB	DP	DP	PB	DP	DP	PB							
Runners on First and Second																
hitter	Bx,DP	DP	PB	DP	DP	PB	DP	DP	PB							
hitter	Bx	DP	PB	Bx	DP	PB	DP	DP	PB							
Runners on All Bases																
hitter	C	DP	PB	C	DP	PB	DP	DP	PB							
hitter	C	DP	PB	C	DP	PB	DP	DP	PB							
Runners on First and Third																
hitter	C,DP	DP	PB	DP	DP	PB	DP	DP	PB							
hitter	C,DP	DP	PB	DP	DP	PB	DP	DP	PB							
aseaman	Drive runner runner on third				Play runner on third if he breaks and a good play can be made.											
w h e n	back before making play															
g C.																
Runners on Second and Third																
hitter	C	C	PB	C	C	PB	PB	PB	PB							
hitter	C	C	PB	C	C	PB	PB	PB	PB							

se fielding positions may be changed somewhat, depend-
the speed of the base runners and the defensive ability
players. Remember to keep all game situations and
le plays in mind.

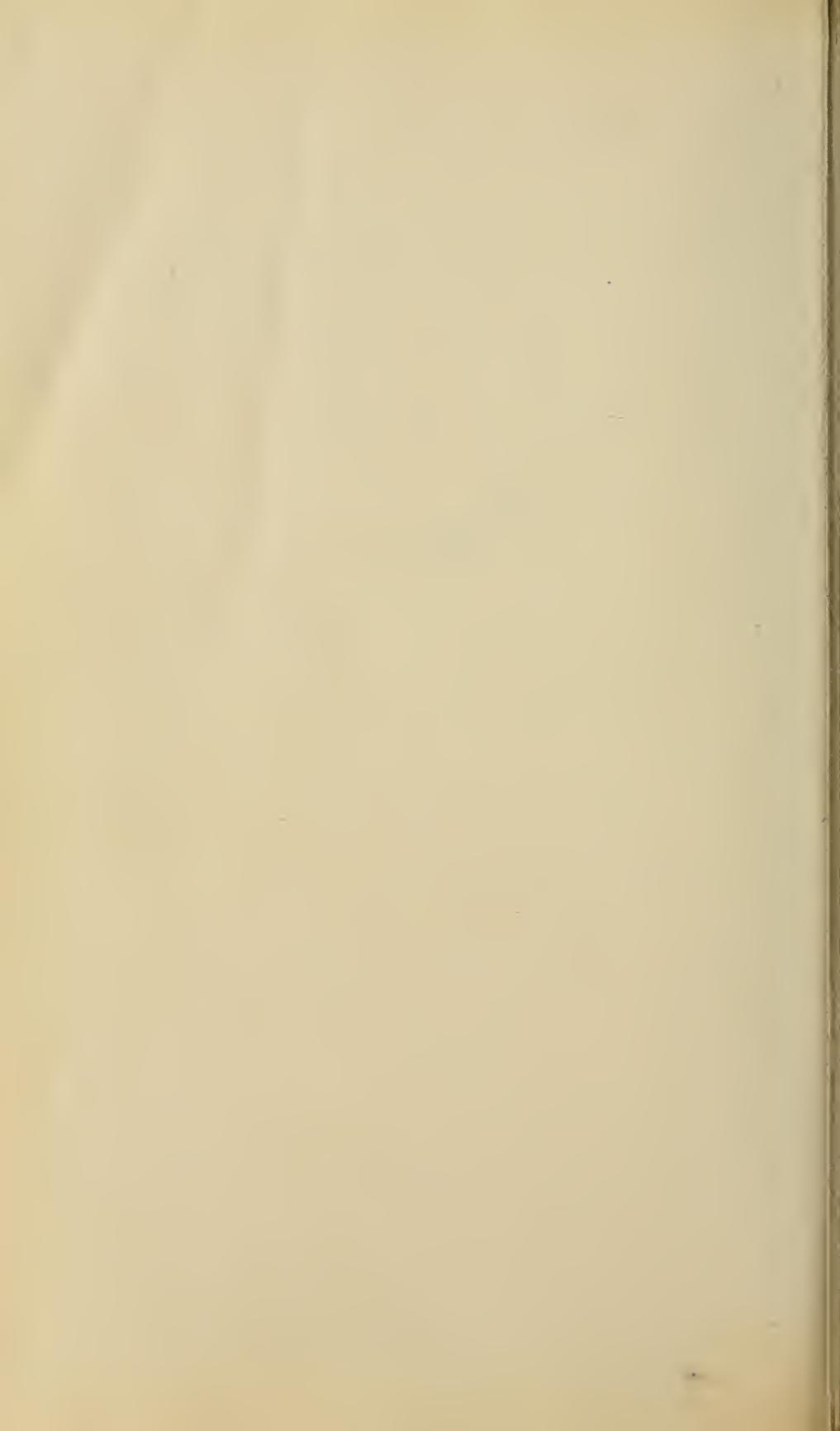
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